SAMSUNG

Samsung SMART CAMERA

This user manual includes detailed usage instructions for your camera. Please read this manual thoroughly.

# USER MANUAL

WB150/WB150F/
WB151/WB151F/WB152F

**Click a topic**


- Basic troubleshooting
- Quick reference
- Contents
- Basic functions
- Extended functions
- Shooting options
- Playback/Editing
- Wireless network (WB150F/WB151F/WB152F only)
- Settings
- Appendixes
- Index

# Health and safety information

Always comply with the following precautions and usage tips to avoid dangerous situations and ensure peak performance of your camera.

**Warning**—situations that could cause injury to yourself or others

**Do not disassemble or attempt to repair your camera.**
This may result in electric shock or damage to the camera.

**Do not use your camera near flammable or explosive gases and liquids.**
This may cause a fire or explosion.

**Do not insert flammable materials into the camera or store these materials near the camera.**
This may cause a fire or electric shock.

**Do not handle your camera with wet hands.**
This may result in electric shock.

**Prevent damage to subjects' eyesight.**
Do not use the flash in close proximity (closer than 1 m/3 ft) to people or animals. If you use the flash too close to your subject's eyes, this can cause temporary or permanent eyesight damage.

**Keep your camera away from small children and pets.**
Keep your camera and all accessories out of the reach of small children and animals. Small parts may cause choking or serious injury if swallowed. Moving parts and accessories may present physical dangers as well.

**Do not expose the camera to direct sunlight or high temperatures for an extended period of time.**
Prolonged exposure to sunlight or extreme temperatures can cause permanent damage to your camera's internal components.

**Avoid covering the camera or charger with blankets or clothes.**
The camera may overheat, which may distort the camera or cause a fire.

**Do not handle the power supply cord or go near the charger during a thunderstorm.**
This may result in electric shock.

**If liquid or foreign objects enter your camera, immediately disconnect all power sources, such as the battery or charger, and then contact a Samsung service center.**

**Comply with any regulations that restrict the use of a camera in a certain area.**

- Avoid interference with other electronic devices.
- Turn off the camera when in an aircraft. Your camera can cause interference with aircraft equipment. Follow all airline regulations and turn off your camera when directed by airline personnel.
- Turn off the camera near medical equipment. Your camera can interfere with medical equipment in hospitals or health care facilities. Follow all regulations, posted warnings, and directions from medical personnel.

**Avoid interference with pacemakers.**
Maintain a minimum of 15 cm (6 inches) between this camera and all pacemakers to avoid potential interference, as recommended by the manufacturer and the independent research group, Wireless Technology Research. If you have any reason to suspect that your camera is interfering with a pacemaker or other medical device, turn off the camera immediately and contact the manufacturer of the pacemaker or medical device for guidance.

**Caution**—situations that could cause damage to your camera or other equipment

**Remove the batteries from your camera when storing it for an extended period of time.**
Installed batteries may leak or corrode over time and cause serious damage to your camera.

**Use only authentic, manufacturer-recommended, Lithium-ion replacement batteries. Do not damage or heat the battery.**
Inauthentic, damaged, or heated batteries may cause a fire or personal injury.

**Use only Samsung-approved batteries, chargers, cables and accessories.**
- Using unauthorized batteries, chargers, cables or accessories can cause batteries to explode, damage your camera, or cause injury.
- Samsung is not responsible for damage or injuries caused by unapproved batteries, chargers, cables or accessories.

**Use the battery only for its intended purpose.**
Misusing the battery may cause a fire or electric shock.

**Do not touch the flash while it fires.**
The flash is very hot when fired and may burn your skin.

**When you use the AC charger, turn off the camera before you disconnect the power to the AC charger.**
Failing to do so may result in fire or electric shock.

**Disconnect the charger from the wall socket when not in use.**
Failing to do so may result in fire or electric shock.

**Do not use a damaged power supply cord, plug, or loose outlet when you charge batteries.**
This may cause a fire or electric shock.

**Do not allow the AC charger to come in contact with the +/- terminals on the battery.**
This may cause a fire or electric shock.

**Do not force the camera's parts or apply pressure to the camera.**

This may cause your camera to malfunction.

**Exercise caution when you connect cables or adapters and install batteries and memory cards.**

If you force the connectors, improperly connect cables, or improperly install batteries and memory cards, you can damage ports, connectors, and accessories.

**Keep cards with magnetic strips away from the camera case.**

Information stored on the card may be damaged or erased.

**Never use a damaged charger, battery, or memory card.**

This may result in electric shock or camera malfunction or cause a fire.

**Check that the camera is operating properly before use.**

The manufacturer takes no responsibility for any loss of files or damage that may result from camera malfunction or improper use.

**You must plug the small end of the USB cable into your camera.**

If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.

**Avoid interference with other electronic devices.**

Your camera emits radio frequency (RF) signals that may interfere with unshielded or improperly shielded electronic equipment, such as pacemakers, hearing aids, medical devices, and other electronic devices in homes or vehicles. Consult the manufacturers of your electronic devices to solve any interference problems you experience. To prevent unwanted interference, use only Samsung-approved devices or accessories.

**Use your camera in the normal position.**

Avoid contact with your camera's internal antenna.

## Data transference and your responsibilities

- Data transferred via WLAN could be leaked, so avoid transferring sensitive data in public areas or on open networks.
- The camera manufacturer is not liable for any data transfers that infringe on copyrights, trademarks, intellectual property laws, or public decency ordinances.

**Copyright information**

- Microsoft Windows and the Windows logo are registered trademarks of the Microsoft Corporation.
- Mac is a registered trademark of the Apple Corporation.
- Wi-Fi®, the Wi-Fi CERTIFIED logo, and the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance.
- Trademarks and trade names used in this manual are the property of their respective owners.

- Camera specifications or contents of this manual may be changed without prior notice due to upgrade of camera functions.
- We recommend using your camera within the country where you purchased it.
- Use this camera responsibly and adhere to all laws and regulations concerning its use.
- You are not allowed to reuse or distribute any part of this manual without prior permission.
- For Open Source License information, refer to the 'OpenSourceInfo.pdf' in the provided CD-ROM.

## Outline of the User Manual


**Basic functions** 14

Learn about your camera's layout, icons, and basic functions for shooting.

**Extended functions** 34

Learn how to capture a photo and record a video by selecting a mode.

**Shooting options** 53

Learn how to set the options in Shooting mode.

**Playback/Editing** 76

Learn how to play back photos or videos, and edit photos or videos. Also, learn how to connect your camera to your computer, photo printer, or TV.

**Wireless network (WB150F/WB151F/WB152F only)** 99

Learn how to connect to wireless local area networks (WLANs) and use functions.

**Settings** 120

Refer to options to configure your camera's settings.

**Appendixes** 126

Get information about error messages, specifications, and maintenance.

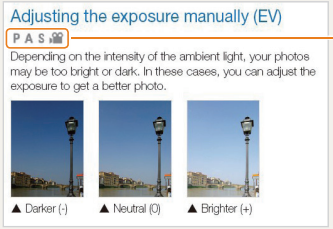
## Indicators used in this manual

| Shooting mode | Indicator |
|---|---|
| Smart Auto | SMART |
| Program | P |
| Aperture Priority, Shutter Priority, Manual | A·S·M |
| Scene | SCN |
| Magic Plus | |
| Wi-Fi (WB150F/WB151F/WB152F only) | Wi-Fi |
| Live Panorama (WB150/WB151 only) | |
| Settings | |
| Movie | |

### Shooting mode icons

These icons appear in the text when a function is available in a mode. See the example below.
Note: The SCN or mode may not support functions for all scenes or modes.

### For example:


Adjusting the exposure manually (EV)
P A S
Depending on the intensity of the ambient light, your photos may be too bright or dark. In these cases, you can adjust the exposure to get a better photo.
▲ Darker (-)
▲ Neutral (0)
▲ Brighter (+)

Available in Program, Aperture Priority, Shutter Priority, and Movie modes

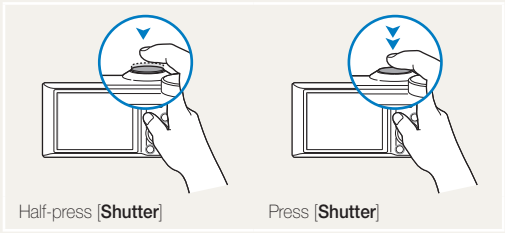
## Icons used in this manual

| Icon | Function |
|---|---|
| | Additional information |
| | Safety warnings and precautions |
| [ ] | Camera buttons. For example, [**Shutter**] represents the shutter button. |
| ( ) | Page number of related information |
| → | The order of options or menus you must select to perform a step; for example: Select **Face Detection** → **Normal** (represents Select **Face Detection**, and then select **Normal**). |
| * | Annotation |

# Expressions used in this manual

### Pressing the shutter

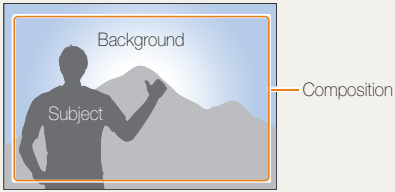
- Half-press [**Shutter**]: Press the shutter halfway down
- Press [**Shutter**]: Press the shutter all the way down



Half-press [**Shutter**] Press [**Shutter**]

### Subject, background, and composition

- **Subject**: The main object in a scene, such as a person, animal, or still life
- **Background**: The objects around the subject
- **Composition**: The combination of a subject and background




### Exposure (Brightness)

The amount of light that enters your camera determines the exposure. You can alter the exposure by changing the shutter speed, aperture value, or ISO sensitivity. By altering the exposure, your photos will be darker or lighter.

▲ Normal exposure

▲ Overexposure (too bright)

# Basic troubleshooting

Learn to solve common problems by setting shooting options.

| | | |
|---|---|---|
| | **The subject's eyes appear red.** | Red eye occurs when the subject's eyes reflect light from the camera flash.<br>• Set the flash option to **Red-eye** or **Red-eye Fix**. (p. 57)<br>• If the photo has already been captured, select **Red-eye Fix** in the edit menu. (p. 90) |
| | **Photos have dust spots.** | If dust particles are present in the air, you may capture them in photos when you use the flash.<br>• Turn off the flash or avoid capturing photos in a dusty place.<br>• Set ISO sensitivity options. (p. 59) |
| | **Photos are blurred.** | Blurring can occur if you capture photos in low light conditions or hold the camera incorrectly.<br>Use the OIS function or half-press [**Shutter**] to ensure the subject is focused. (p. 32) |
| | **Photos are blurred when shooting at night.** | As the camera tries to let in more light, the shutter speed slows. This can make it difficult to hold the camera steady long enough to capture a clear photo and may result in camera shake.<br>• Select **Night** in **SCN** mode. (p. 37)<br>• Turn on the flash. (p. 57)<br>• Set ISO sensitivity options. (p. 59)<br>• Use a tripod to prevent your camera from shaking. |
| | **Subjects come out too dark because of backlighting.** | When the light source is behind the subject or when there is a high contrast between light and dark areas, the subject may appear too dark.<br>• Avoid shooting toward the sun.<br>• Select **Backlight** in **SCN** mode. (p. 37)<br>• Set the flash option to **Fill in**. (p. 57)<br>• Adjust the exposure. (p. 69)<br>• Set the Auto Contrast Balance (**ACB**) option. (p. 70)<br>• Set the metering option to **Spot** if a subject is in the center of the frame. (p. 70) |

# Quick reference

## Capturing photos of people

- **SCN** mode > Beauty Shot ▶ 38
- mode > Picture in Picture ▶ 46
- Red-eye/Red-eye Fix (to prevent or correct red-eye) ▶ 57
- Face Detection ▶ 64
- Self-Portrait ▶ 65

## Capturing photos at night or in the dark

- **SCN** mode > Night, Sunset, Dawn ▶ 37
- Flash options ▶ 57
- ISO sensitivity (to adjust the sensitivity to light) ▶ 59

## Capturing action photos

- **S** mode ▶ 42
- Continuous, Motion Capture ▶ 73

## Capturing photos of text, insects, or flowers

- **SCN** mode > Text ▶ 37
- Macro ▶ 60

## Adjusting the exposure (brightness)

- ISO sensitivity (to adjust the sensitivity to light) ▶ 59
- EV (to adjust exposure) ▶ 69
- ACB (to compensate for subjects against bright backgrounds) ▶ 70
- Metering ▶ 70
- AEB (to capture 3 photos of the same scene with different exposures) ▶ 73

## Capturing photos of scenery

- **SCN** mode > Landscape ▶ 37
- mode > Live Panorama ▶ 44

## Applying effects to photos

- mode > Magic Frame ▶ 45
- mode > Split Shot ▶ 46
- mode > Artistic Brush ▶ 48
- mode > Photo Filter ▶ 49
- Image Adjust (to adjust Sharpness, Contrast, or Saturation) ▶ 74

## Applying effects to videos

- mode > Movie Filter ▶ 50

## Reducing camera shake

- Optical Image Stabilization (OIS) ▶ 31

- Viewing files by category in Smart Album ▶ 79
- Viewing files as thumbnails ▶ 80
- Deleting all files on the memory ▶ 82
- Viewing files as a slide show ▶ 84
- Viewing files on a TV ▶ 91
- Connecting your camera to a computer ▶ 92
- Using photo or video sharing websites (WB150F/WB151F/WB152F only) ▶ 104
- Sending photos or videos via email (WB150F/WB151F/WB152F only) ▶ 107
- Adjusting sound and volume ▶ 122
- Adjusting the brightness of the display ▶ 123
- Changing the display language ▶ 124
- Setting the date and time ▶ 124
- Before contacting a service center ▶ 138

# Contents


Basic functions ..... 14
- Unpacking ..... 15
- Camera layout ..... 16
- Inserting the battery and memory card ..... 19
- Charging the battery and turning on your camera ..... 20
  - Charging the battery ..... 20
  - Turning on your camera ..... 20
- Performing the initial setup ..... 21
- Learning icons ..... 23
- Selecting options or menus ..... 24
- Setting the display and sound ..... 26
  - Setting the display type ..... 26
  - Setting the sound ..... 27
- Capturing photos ..... 28
  - Zooming ..... 29
  - Reducing camera shake (OIS) ..... 31
- Tips for getting a clearer photo ..... 32

Extended functions ..... 34
- Using the Smart Auto mode ..... 35
- Using the Scene mode ..... 37
  - Using the Beauty Shot mode ..... 38
- Using the Program mode ..... 39
- Using the Aperture Priority, Shutter Priority, or Manual mode ..... 40
  - Using the Aperture Priority mode ..... 41
  - Using the Shutter Priority mode ..... 42
  - Using the Manual mode ..... 43
- Using the Magic Plus mode ..... 44
  - Using the Live Panorama mode ..... 44
  - Using the Magic Frame mode ..... 45
  - Using the Split Shot mode ..... 46
  - Using the Picture-in-Picture mode ..... 46
  - Using the Artistic Brush mode ..... 48
  - Using the Photo Filter mode ..... 49
  - Using the Movie Filter mode ..... 50
- Using the Movie mode ..... 51
  - Using the Smart Scene Detection mode ..... 52

Shooting options ..... 53
Selecting a resolution and quality ..... 54
Selecting a resolution ..... 54
Selecting an image quality ..... 55
Using the timer ..... 56
Shooting in the dark ..... 57
Preventing red-eye ..... 57
Using the flash ..... 57
Adjusting the ISO sensitivity ..... 59
Changing the camera's focus ..... 60
Using macro ..... 60
Using auto focus ..... 60
Focusing on a selected area ..... 62
Using tracking auto focus ..... 62
Adjusting the focus area ..... 63
Using Face Detection ..... 64
Detecting faces ..... 64
Capturing a self portrait shot ..... 65
Capturing a smile shot ..... 65
Detecting eye blinking ..... 66
Using Smart Face Recognition ..... 66
Registering faces as your favorites (My Star) ..... 67
Adjusting brightness and color ..... 69
Adjusting the exposure manually (EV) ..... 69
Compensating for backlighting (ACB) ..... 70
Changing the metering option ..... 70
Selecting a White Balance setting ..... 71
Using burst modes ..... 73
Adjusting images ..... 74
Reducing the sound of the zoom ..... 75

Playback/Editing ..... 76
Viewing photos or videos in Playback mode ..... 77
Starting Playback mode ..... 77
Viewing photos ..... 83
Playing a video ..... 85
Editing a photo ..... 87
Resizing photos ..... 87
Rotating a photo ..... 87
Applying Smart Filter effects ..... 88
Adjusting your photos ..... 89
Creating a print order (DPOF) ..... 90
Viewing files on a TV ..... 91
Transferring files to your Windows computer ..... 92
Transferring files with Intelli-studio ..... 93
Transferring files by connecting the camera as a removable disk ..... 95
Disconnecting the camera (for Windows XP) ..... 96
Transferring files to your Mac computer ..... 97
Printing photos with a PictBridge photo printer ..... 98

Wireless network (WB150F/WB151F/WB152F only) .... 99
Connecting to a WLAN and configuring network settings ..... 100
Connecting to a WLAN ..... 100
Using the login browser ..... 101
Network connection tips ..... 102
Entering text ..... 103
Using photo or video sharing websites ..... 104
Accessing a website ..... 104
Uploading photos or videos ..... 104
Sending photos or videos via email ..... 106
Changing email settings ..... 106
Sending photos or videos via email ..... 107
Sending photos or videos to a smart phone ..... 109
Using a smart phone as a remote shutter release .... 110
Uploading photos to a cloud server ..... 112
Using Auto Backup to send photos or videos ..... 113
Installing the program for Auto Backup on your PC ..... 113
Sending photos or videos to a PC ..... 113
Viewing photos or videos on a TV Link-enabled TV ..... 115
Sending photos using Wi-Fi Direct ..... 117
About the Wake on LAN (WOL) feature ..... 118

Settings ..... 120
Settings menu ..... 121
Accessing the settings menu ..... 121
Sound ..... 122
Display ..... 122
Connectivity ..... 123
General ..... 124

Appendixes ..... 126
Error messages ..... 127
Camera maintenance ..... 129
Cleaning your camera ..... 129
Using or storing the camera ..... 130
About memory cards ..... 131
About the battery ..... 134
Before contacting a service center ..... 138
Camera specifications ..... 141
Glossary ..... 145
FCC notice ..... 150
Declaration sentence in official languages ..... 153
Index ..... 155

# Basic functions

Learn about your camera's layout, icons, and basic functions for shooting.


Unpacking ..... 15
Camera layout ..... 16
Inserting the battery and memory card ... 19
Charging the battery and turning on your camera ..... 20
- Charging the battery ..... 20
- Turning on your camera ..... 20

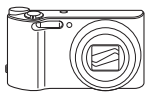
Performing the initial setup ..... 21
Learning icons ..... 23
Selecting options or menus ..... 24
Setting the display and sound ..... 26
- Setting the display type ..... 26
- Setting the sound ..... 27

Capturing photos ..... 28
- Zooming ..... 29
- Reducing camera shake (OIS) ..... 31

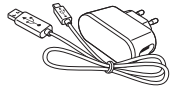
Tips for getting a clearer photo ..... 32

# Unpacking

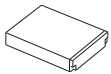
The following items are included in your product box.



Camera

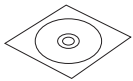


AC adapter/
USB cable



Rechargeable battery

Strap

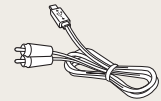


User Manual CD-ROM

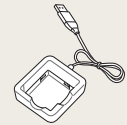
Quick Start Guide

**Optional accessories**

Camera case



A/V cable



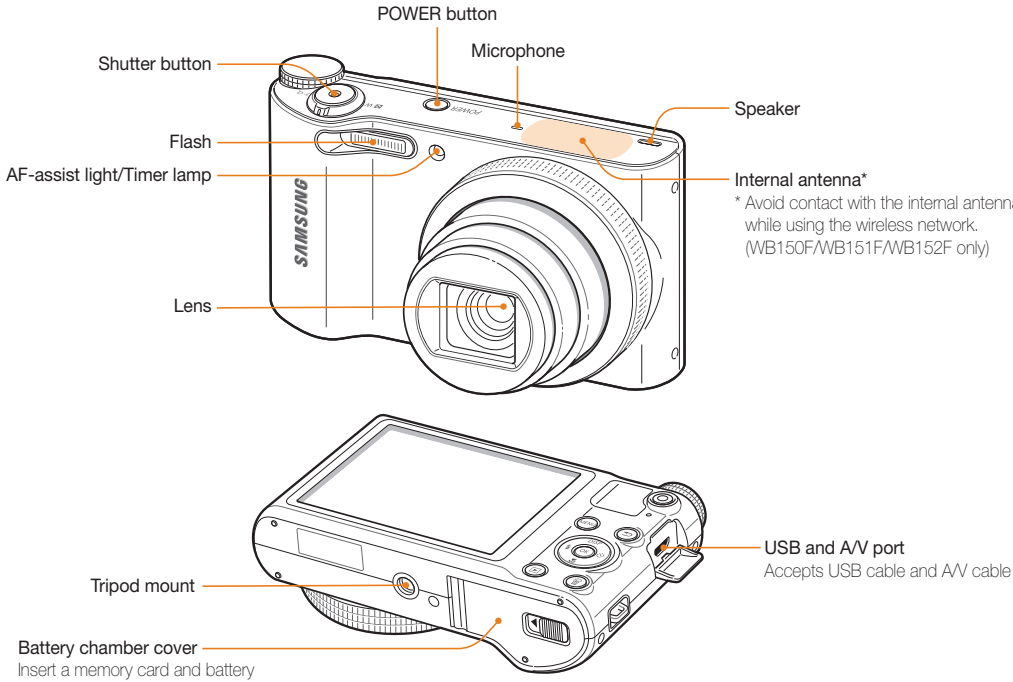
Battery charger

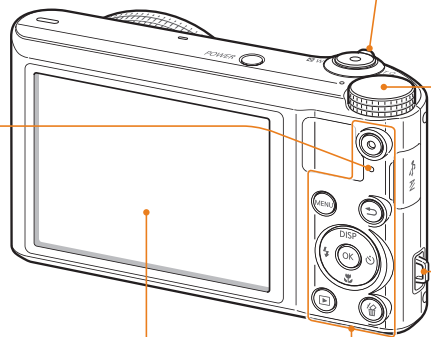
Memory card

- The illustrations may differ slightly from the items shipped with your product.
- The items included in the box may differ depending on the model.
- You can purchase optional accessories at a retailer or a Samsung service center. Samsung is not responsible for any problems caused by using unauthorized accessories.

# Camera layout

Before you start, familiarize yourself with your camera's parts and their functions.



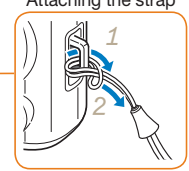



Zoom button
- **In Shooting mode**: Zoom in or out
- **In Playback mode**: Zoom in on part of a photo or view files as thumbnails, or adjust the volume

Mode dial
(p. 18)

Status lamp
- **Blinking**: When the camera is saving a photo or video, being read by a computer or printer, when the image is out of focus, or there is a problem charging the battery (On WB150F/WB151F/WB152F, when the camera is connecting to WLAN or sending a photo)
- **Steady**: When the camera is connected to a computer, charging the battery, or when the image is in focus

Attaching the strap




Display

Buttons
(p. 18)

### Mode dial

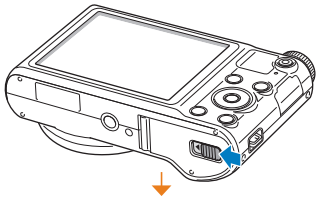
| Icon | Description |
|---|---|
| SMART | **Smart Auto**: Capture a photo with a scene mode selected automatically by the camera. |
| P | **Program**: Capture a photo by setting options except the shutter speed and aperture value which the camera sets automatically. |
| A·S·M | **A** — **Aperture Priority**: The camera selects a shutter speed based on the aperture value you have set manually.<br>**S** — **Shutter Priority**: The camera selects an aperture value based on the shutter speed you have set manually.<br>**M** — **Manual**: Adjust various camera settings including shutter speed and aperture value. |
| SCN | **Scene**: Capture a photo with options preset for a specific scene. |
| | **Magic Plus**: Capture a photo, record a video, or edit an image with various effects. |
| Wi-Fi | **Wi-Fi**: Connect to wireless local area networks and use functions. (WB150F/WB151F/WB152F only) |
| | **Live Panorama**: Capture and combine a series of photos to create a panoramic image. (WB150/WB151 only) |
| | **Settings**: Configure your camera's settings. |
| | **Movie**: Customize settings to record a video. |

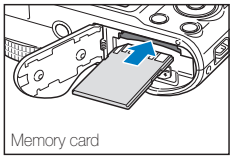
### Buttons

| Button | Description |
|---|---|
| | Start recording a video. |
| MENU | Access options or menus. |
| | Move back. |
| DISP / OK | Basic functions / Other functions<br>DISP: Change the display option. / Move up<br>Change the macro option. / Move down<br>Change the flash option. / Move left<br>Change the timer option. / Move right |
| OK | Confirm the highlighted option or menu. |
| | Enter Playback mode. |
| | Delete files in Playback mode. |

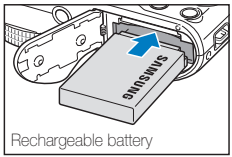
# Inserting the battery and memory card

Learn how to insert the battery and an optional memory card into the camera.

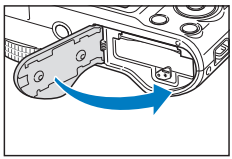


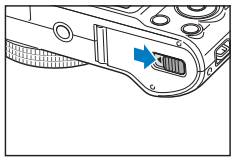



Insert a memory card with the gold-colored contacts facing up.

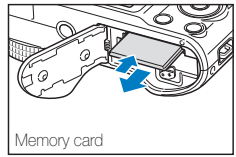



Insert the battery with the Samsung logo facing up.

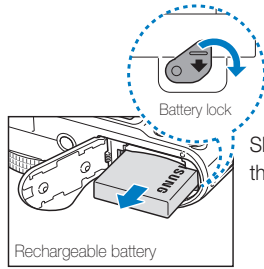




## Removing the battery and memory card




Push the card gently until it disengages from the camera, and then pull it out of the slot.



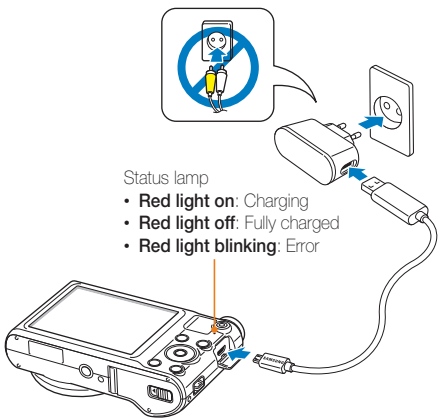

Slide the lock down to release the battery.

You can use the internal memory for temporary storage if a memory card is not inserted.

# Charging the battery and turning on your camera

## Charging the battery

Before you use the camera for the first time, you must charge the battery. Plug the small end of the USB cable into your camera, and then plug the other end of the USB cable into the AC adapter.

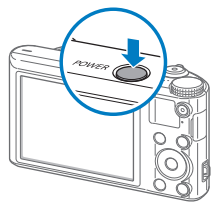



Use only the AC adapter and USB cable supplied with your camera. If you use another AC adapter (such as SAC-48), the camera battery may not charge or work properly.

## Turning on your camera

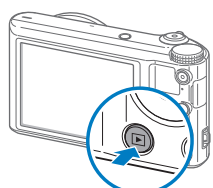
Press [**POWER**] to turn your camera on or off.

- The initial setup screen appears when you turn on the camera for the first time. (p. 21)




### Turning on your camera in Playback mode

Press [▶]. The camera turns on and immediately accesses Playback mode.

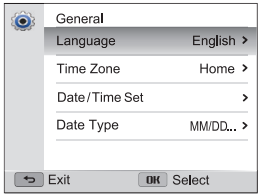


If you turn on your camera by pressing and holding [▶] until the status lamp blinks, the camera does not emit any sounds.

# Performing the initial setup

When you turn on your camera for the first time, the initial setup screen appears. Follow the steps below to configure the camera's basic settings.

1 Verify that **Language** is highlighted, and then press [⏲] or [**OK**].



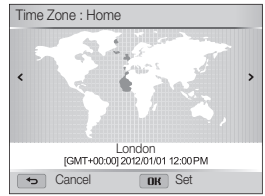

2 Press [**DISP**/🌷] to select a language, and then press [**OK**].

3 Press [🌷] to select **Time Zone**, and then press [⏲] or [**OK**].

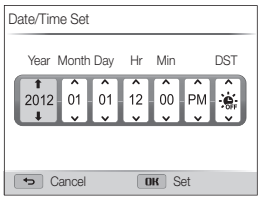
4 Press [**DISP**/🌷] to select **Home**, and then press [**OK**].

- When you travel to another country, select **Visit**, and then select a new time zone.

5 Press [⚡/⏲] to select a time zone, and then press [**OK**] → [⮌].



6 Press [] to select **Date/Time Set**, and then press [] or [**OK**].




- The screen may differ depending on the language selected.

7 Press [/] to select an item.

8 Press [**DISP**/] to set the date, time, and daylight-saving time, and then press [**OK**].

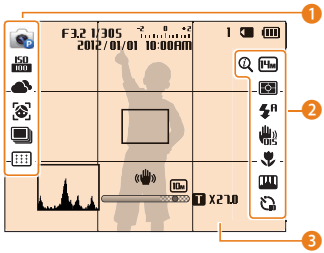
9 Press [] to select **Date Type**, and then press [] or [**OK**].

10 Press [**DISP**/] to select a date type, and then press [**OK**].

11 Press [] to finish the initial setup.

# Learning icons

The icons the camera displays on the screen change according to the mode you select or the options you set.




### 1 Shooting options (left)

| Icon | Description |
|---|---|
| | Shooting mode |
| ISO 100 | ISO sensitivity |
| | White balance |
| | Face detection |
| | Face retouch |
| | Face tone |
| | Burst option |
| | Focus area |

### 2 Shooting options (right)

| Icon | Description |
|---|---|
| | Intelli zoom on |
| 14M | Photo resolution |
| HD | Video resolution |
| | Metering |
| 30 | Frame rate |
| A | Flash |
| ALIVE | Sound Alive on |
| OIS | Optical Image Stabilization (OIS) |
| | Auto focus option |
| | Image adjustment (sharpness, contrast, and saturation) |
| 10 | Timer |

### 3 Shooting information

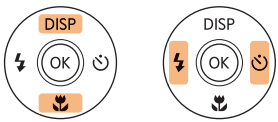
| Icon | Description |
|---|---|
| F3.2 | Aperture value |
| 1/305 | Shutter speed |
| 00:00:10 | Available recording time |
| | Exposure value |
| 2012/01/01 | Current date |
| 10:00 AM | Current time |
| 1 | Available number of photos |
| | Memory card inserted |
| | • : Fully charged<br>• : Partially charged<br>• : Empty (Recharge) |
| | Auto focus frame |
| | Camera shake |
| W T | Zoom indicator |
| 10M | Photo resolution when the Intelli zoom is on |
| X27.0 | Zoom ratio |
| | Histogram (p. 26) |

# Selecting options or menus

To select an option or a menu, press [**MENU**], and then press [**DISP**/**✿**/**ϟ**/**⏲**] or [**OK**].

1 In Shooting mode, press [**MENU**].

2 Select an option or a menu.
- To move up or down, press [**DISP**] or [**✿**].
- To move left or right, press [**ϟ**] or [**⏲**].




3 Press [**OK**] to confirm the highlighted option or menu.

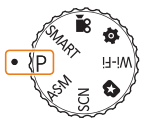
## Going back to the previous menu

Press [⮌] to go back to the previous menu.

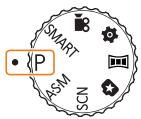
Half-press [**Shutter**] to return to Shooting mode.

**For example, to select a White Balance option in Program mode:**

1 Rotate the mode dial to **P**.

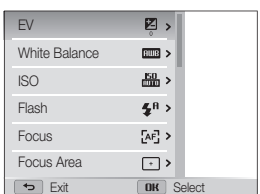



▲ WB150F/WB151F/WB152F

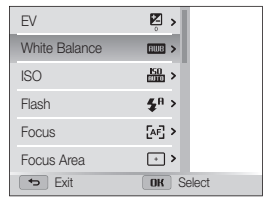



▲ WB150/WB151

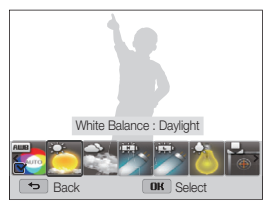
2 Press [**MENU**].




3 Press [**DISP**/] to select **White Balance**, and then press [] or [**OK**].




4 Press [/] to select a White Balance option.



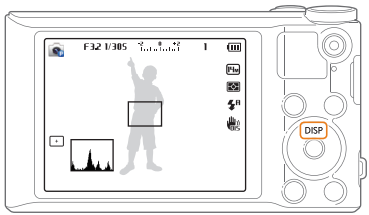

5 Press [**OK**] to save your settings.

# Setting the display and sound

Learn how to change the basic display information and sound settings.

## Setting the display type

You can select a display type for the Shooting or Playback mode. Each type displays different shooting or playback information. See the table below.

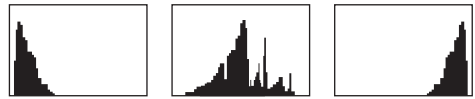



Press [**DISP**] repeatedly to change the display type.

| Mode | Display type |
|---|---|
| Shooting | • Hide all information about shooting options.<br>• Show all information about shooting options.<br>• Show a histogram. |
| Playback | • Hide all information about the current file.<br>• Show information about the current file (excluding the shooting settings and histogram).<br>• Show all information about the current file. |

### About histograms

A histogram is a graph that illustrates how light is distributed in your photo. If the histogram has a high peak on the left, the photo is underexposed and will appear dark. A peak on the right of the graph means that the photo is overexposed and will appear washed out. The height of the peaks is related to color information. The more of a particular color, the taller the peak.



▲ Under-exposed ▲ Well-exposed ▲ Over-exposed

### Setting the option display view

You can hide or show the option display appearing in some modes.

Press [OK] repeatedly.

- Hide the option display.
- Show the option display.

▲ For example, in Scene mode

## Setting the sound

Turn the sound your camera emits when you perform functions on or off.

1. Rotate the mode dial to ⚙.
2. Select **Sound** → **Beep Sound**.
3. Select an option.

| Option | Description |
|---|---|
| **Off** | The camera does not emit any sounds. |
| **On** | The camera emits sounds. |

# Capturing photos

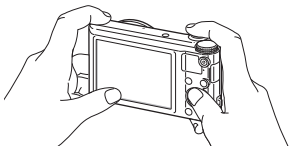
Learn how to capture photos easily and quickly in Smart Auto mode.

1 Rotate the mode dial to **SMART**.

▲ WB150F/WB151F/ WB152F

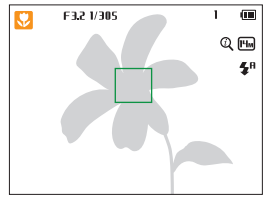
▲ WB150/WB151

2 Align your subject in the frame.



3 Half-press [**Shutter**] to focus.

- A green frame means the subject is in focus.
- A red frame means the subject is out of focus.




4 Press [**Shutter**] to capture a photo.

5 Press [▶] to view the captured photo.

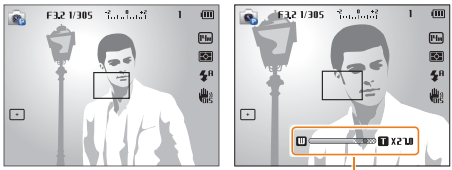
- To delete the photo, press [🗑], and then select **Yes**.

6 Press [▶] to return to Shooting mode.

See page 32 for tips to get clearer photos.

## Zooming

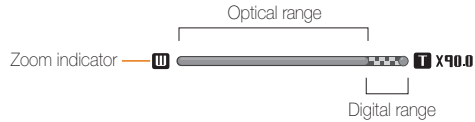
You can capture close-up photos by adjusting the zoom.



- The farther you rotate the zoom button, the faster the camera zooms in or out.
- When you rotate the zoom button, the zoom ratio shown on the screen may change inconsistently.

### Digital zoom P A S M SCN

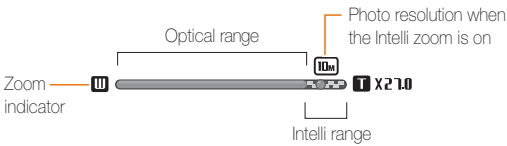
The Digital zoom is supported by default in Shooting mode. If you zoom in on a subject in Shooting mode and the zoom indicator is in the digital range, your camera is using the Digital zoom. By using both the 18X Optical zoom and 5X Digital zoom, you can zoom in up to 90 times.




- The Digital zoom is not available with the Selection AF option, Tracking AF option, or Manual Focus.
- If you capture a photo with the Digital zoom, the photo quality may be lower than normal.

## Intelli zoom P A S M SCN

If the zoom indicator is in the Intelli range, your camera is using the Intelli zoom. Photo resolution varies according to the zoom rate if you use the Intelli zoom. By using both the Optical zoom and Intelli zoom, you can zoom in up to 36 times.




- Intelli zoom is not available with the Selection AF option, Tracking AF option, or Manual Focus.
- The Intelli zoom helps you capture a photo with less quality deterioration than the Digital zoom. However, the photo quality may be lower than when you use the Optical zoom.
- The Intelli zoom is available only when you set a 4:3 resolution ratio. If you set another resolution ratio with Intelli zoom on, the Intelli zoom will be turned off automatically.

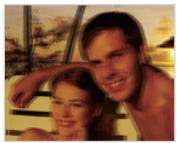
## Setting Intelli zoom

1. In Shooting mode, press [**MENU**].
2. Select **Intelli Zoom**.
3. Select an option.

| Icon | Description |
|---|---|
| OFF | **Off**: The Intelli zoom is deactivated. |
| | **On**: The Intelli zoom is activated. |

## Reducing camera shake (OIS) P A S M

Reduce camera shake optically in Shooting mode.



▲ Before correction

▲ After correction

1 In Shooting mode, press [**MENU**].

2 Select **OIS**.

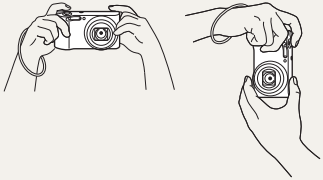
3 Select an option.

| Icon | Description |
|---|---|
| OFF | **Off**: OIS is deactivated. |
| OIS | **On**: OIS is activated. |

- OIS may not function properly when:
  - you move your camera to follow a moving subject
  - you use the Digital zoom
  - there is too much camera shake
  - the shutter speed is slow (for example, when you capture night scenes)
  - the battery is low
  - you capture a close-up shot
- If you use the OIS function with a tripod, your images may be blurred by the vibration of the OIS sensor. Deactivate the OIS function when you use a tripod.
- If the camera is hit or dropped, the display will be blurry. If this occurs, turn off the camera, and then turn it on again.

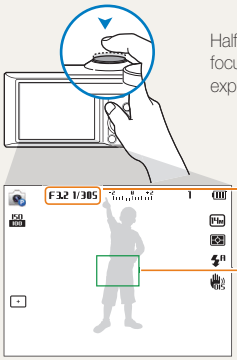
# Tips for getting a clearer photo

## Holding your camera correctly



Ensure nothing is blocking the lens, flash, or microphone.

## Half-pressing the shutter button




Half-press [**Shutter**] and adjust the focus. The camera adjusts the focus and exposure automatically.

The camera sets the aperture value and shutter speed automatically.

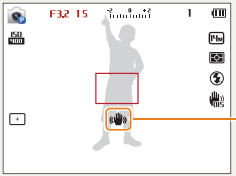
**Focus frame**

- Press [**Shutter**] to capture the photo if the focus frame appears in green.
- Change the composition and half-press [**Shutter**] again if the focus frame appears in red.

## Reducing camera shake

Set the Optical Image Stabilization option to reduce camera shake optically. (p. 31)

## When « » is displayed



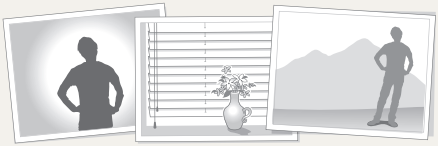

When you shoot in the dark, avoid setting the flash option to **Slow Sync** or **Off**. The aperture remains open longer and it may be harder to hold the camera steady long enough to capture a clear photo.

- Use a tripod or set the flash option to **Fill in**. (p. 57)
- Set ISO sensitivity options. (p. 59)

## Preventing your subject from being out of focus

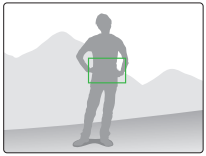
It may be difficult to get your subject in focus when:

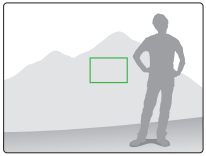
- there is little contrast between the subject and background (for example, when your subject is wearing clothing that is similar in color to the background)
- the light source behind the subject is too bright
- the subject is shiny or reflective
- the subject includes horizontal patterns, such as blinds
- the subject is not positioned in the center of the frame



**Using the focus lock**

Half-press [**Shutter**] to focus. When the subject is in focus, you can reposition the frame to change the composition. When you are ready, press [**Shutter**] to capture your photo.





- When you capture photos in low light

Turn on the flash. (p. 57)

- When subjects are moving rapidly

Use the Continuous or Motion Capture function. (p. 73)

# Extended functions

Learn how to capture a photo and record a video by selecting a mode.


Using the Smart Auto mode ..... 35
Using the Scene mode ..... 37
Using the Beauty Shot mode ..... 38
Using the Program mode ..... 39
Using the Aperture Priority, Shutter Priority, or Manual mode ..... 40
Using the Aperture Priority mode ..... 41
Using the Shutter Priority mode ..... 42
Using the Manual mode ..... 43
Using the Magic Plus mode ..... 44
Using the Live Panorama mode ..... 44
Using the Magic Frame mode ..... 45
Using the Split Shot mode ..... 46
Using the Picture-in-Picture mode ..... 46
Using the Artistic Brush mode ..... 48
Using the Photo Filter mode ..... 49
Using the Movie Filter mode ..... 50
Using the Movie mode ..... 51
Using the Smart Scene Detection mode ... 52

# Using the Smart Auto mode

In Smart Auto mode, your camera automatically chooses the appropriate camera settings based on the type of scene it detects. The Smart Auto mode is helpful if you are not familiar with the camera settings for various scenes.

1 Rotate the mode dial to **SMART**.

2 Align your subject in the frame.

- The camera automatically selects a scene. An appropriate scene icon appears at the top left of the screen. The icons are listed below.

| Icon | Description |
|---|---|
| | Landscapes |
| | Scenes with bright white backgrounds |
| | Landscapes at night |
| | Portraits at night |
| | Landscapes with backlighting |
| | Portraits with backlighting |
| | Portraits |
| | Close-up photos of objects |
| | Close-up photos of text |
| | Sunsets |
| | Blue skies |
| | Forested areas |
| | Close-up photos of colorful subjects |
| | Camera is stabilized or on a tripod (when shooting in the dark) |
| | Actively moving subjects |
| | Fireworks (when using a tripod) |

3 Half-press [**Shutter**] to focus.

4 Press [**Shutter**] to capture the photo.

- If the camera does not recognize an appropriate scene mode, it uses the default settings for the **SMART** mode.
- Even if it detects a face, the camera may not select a portrait mode depending on the subject's position or lighting.
- The camera may not select the correct scene depending on the shooting conditions, such as camera shake, lighting, or distance to the subject.
- Even if you use a tripod, the camera may not detect the mode if the subject is moving.
- In **SMART** mode, the camera consumes more battery power, because it changes settings often to select appropriate scenes.

# Using the Scene mode

In Scene mode, you can capture a photo with options that are preset for a specific scene.

1 Rotate the mode dial to **SCN**.

2 Select a scene.

| Option | Description |
|---|---|
| Beauty Shot | Capture a portrait with options to hide facial imperfections. |
| Night | Capture scenes at night or in low lighting (using a tripod is recommended). |
| Landscape | Capture still-life scenes and landscapes. |
| Text | Clearly capture text from printed or electronic documents. |
| Sunset | Capture scenes at sunset, with natural-looking reds and yellows. |
| Dawn | Capture scenes at sunrise. |
| Backlight | Capture backlit subjects. |
| Beach & Snow | Reduce underexposure of subjects caused by sunlight reflected from sand or snow. |

3 Align your subject in the frame, and then half-press [**Shutter**] to focus.

4 Press [**Shutter**] to capture the photo.

## Using the Beauty Shot mode

In Beauty Shot mode, you can capture a portrait with options to hide facial imperfections.

1 Rotate the mode dial to **SCN**.

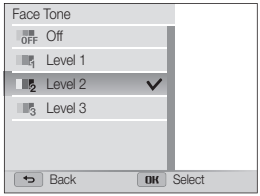
2 Select **Beauty Shot**.

3 Press [**MENU**].

4 Select **Face Tone**.

5 Select an option.

- For example, increase the face tone setting to make skin appear lighter.

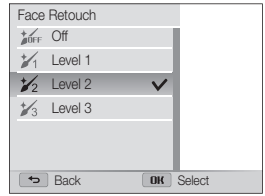



6 Press [**MENU**].

7 Select **Face Retouch**.

8 Select an option.

- For example, increase the face retouch setting to hide more imperfections.




9 Align your subject in the frame, and then half-press [**Shutter**] to focus.

10 Press [**Shutter**] to capture the photo.

When you use the Beauty Shot mode, the focus distance will be set to Auto Macro.

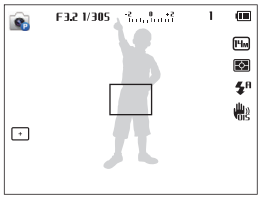
# Using the Program mode

In Program mode, you can set most options, except the shutter speed and aperture value, which the camera sets automatically.

1 Rotate the mode dial to **P**.

2 Set the desired options.

- For a list of options, refer to "Shooting options". (p. 53)




3 Align your subject in the frame, and then half-press [**Shutter**] to focus.

4 Press [**Shutter**] to capture the photo.

# Using the Aperture Priority, Shutter Priority, or Manual mode

Adjust the aperture value or shutter speed to control the exposure of your photos. You can use these options in the Aperture Priority, Shutter Priority, and Manual modes.

### Aperture value

The aperture is a hole that lets light into the camera. The aperture housing contains thin, metal plates that open and close, widening or narrowing the aperture, and controlling the amount of light that enters the camera. The size of the aperture is closely related to the brightness of a photo: the larger the aperture, the brighter the photo; the smaller the aperture, the darker the photo. Note that the larger the aperture value, the smaller the aperture size. For example, an aperture set to 5.6 is larger than an aperture set to 11.

▲ Small aperture value (The size of the aperture is large.)

▲ Large aperture value (The size of the aperture is small.)

### Shutter speed

Shutter speed, which is an important factor in the brightness of a photo, refers to the amount of time it takes to open and close the shutter. A slow shutter speed allows more time to let light in. All things being equal, photos are brighter, but fast moving objects tend to blur. On the other hand, a fast shutter speed allows less time to let light in. Photos are darker, but objects in motion are captured more clearly.

▲ Slow shutter speed

▲ Fast shutter speed

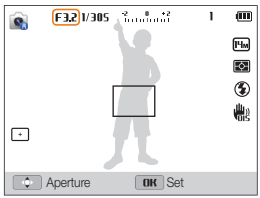
## Using the Aperture Priority mode

The Aperture Priority mode allows you to set the aperture value manually while the camera automatically selects an appropriate shutter speed.

1 Rotate the mode dial to **A**·**S**·**M**.

2 Select .
- To select another mode when the mode dial is set to **A**·**S**·**M**, press [↩], and then select a mode.

3 Press [**OK**] → [**DISP**/] to adjust the aperture value.
- See page 40 for more information about the aperture value.




4 Press [**OK**] to save the setting.

5 Set options.
- For a list of options, refer to "Shooting options". (p. 53)

6 Align your subject in the frame, and then half-press [**Shutter**] to focus.

7 Press [**Shutter**] to capture the photo.

When you set the ISO option to **Auto**, the shutter speed may not change automatically to match the aperture value. In this case, the camera finds an appropriate exposure value by changing the ISO option automatically when you capture a photo. To set the ISO option manually, press [**MENU**], and then select **ISO** → an option.

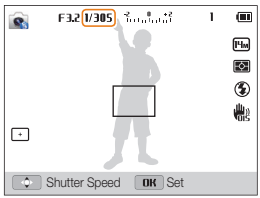
## Using the Shutter Priority mode

The Shutter Priority mode allows you to set the shutter speed manually while the camera automatically selects an appropriate aperture value.

1 Rotate the mode dial to **A·S·M**.

2 Select .
- To select another mode when the mode dial is set to **A·S·M**, press [↩], and then select a mode.

3 Press [**OK**] → [**DISP**/] to adjust the shutter speed.
- See page 40 for more information about the shutter speed.




4 Press [**OK**] to save the setting.

5 Set options.
- For a list of options, refer to "Shooting options". (p. 53)

6 Align your subject in the frame, and then half-press [**Shutter**] to focus.

7 Press [**Shutter**] to capture the photo.

When you set the ISO option to **Auto**, the aperture value may not change automatically to match the shutter speed. In this case, the camera finds an appropriate exposure value by changing the ISO option automatically when you capture a photo. To set the ISO option manually, press [**MENU**], and then select **ISO** → an option.

## Using the Manual mode

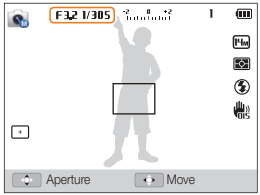
The Manual mode allows you to adjust both the aperture value and the shutter speed manually.

1 Rotate the mode dial to **A·S·M**.

2 Select .

- To select another mode when the mode dial is set to **A·S·M**, press [↩], and then select a mode.

3 Press [**OK**] → [⚡/⏱] to select the aperture value or shutter speed.




4 Press [**DISP**/✋] to adjust the aperture value or shutter speed.

5 Press [**OK**] to save the setting.

6 Set options.

- For a list of options, refer to "Shooting options". (p. 53)

7 Align your subject in the frame, and then half-press [**Shutter**] to focus.

8 Press [**Shutter**] to capture the photo.

# Using the Magic Plus mode

In the Magic Plus mode, you can capture a photo or record a video with various effects.

## Using the Live Panorama mode

In Live Panorama mode, you can capture a wide panoramic scene in a single photo. Capture and combine a series of photos to create a panoramic image.

▲ Shooting example

1 Rotate the mode dial to .
- On WB150/WB151 model, rotate the mode dial to , and then skip to step 3.

2 Select .

3 Align your subject in the frame, and then half-press [**Shutter**] to focus.
- Align the camera with the far left or the far right, or very top or bottom, of the scene you want to capture.

4 Press and hold [**Shutter**] to start shooting.

5 With [**Shutter**] pressed, slowly move the camera in the direction that will let it capture the rest of the panorama.
- When the viewfinder is aligned with the next scene, the camera captures the next photo automatically.

6 When you are finished, release [**Shutter**].
- When you have captured all the necessary shots, the camera combines them into one panoramic photo.

- For best results when capturing panoramic photos, avoid the following:
  - moving the camera too quickly or too slowly
  - moving the camera too little to capture the next image
  - moving the camera at irregular speeds
  - shaking the camera
  - changing the camera direction while capturing a photo
  - shooting in dark places
  - capturing moving subjects nearby
  - shooting conditions where the brightness or color of light is changing
- Selecting Live Panorama mode will disable the digital and optical zoom functions. If you select Live Panorama mode while the lens is zoomed in, the camera automatically zooms out to the default position.
- In Live Panorama mode, some shooting options are not available.
- The camera may stop shooting due to the shooting composition or movement within the scene.
- In Live Panorama mode, your camera may not capture the last scene in its entirety if you stop moving the camera exactly where you want the scene to end. To capture the entire scene, move your camera slightly beyond the point where you want the scene to end.

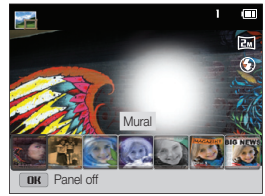
## Using the Magic Frame mode

In Magic Frame mode, you can apply various frame effects to your photos. The shape and the feel of the photos will change according to the frame you select.

1 Rotate the mode dial to .

2 Select .

3 Select an option.




4 Align your subject in the frame, and then half-press [**Shutter**] to focus.

5 Press [**Shutter**] to capture the photo.

In Magic Frame mode, the resolution is automatically set to .

## Using the Split Shot mode

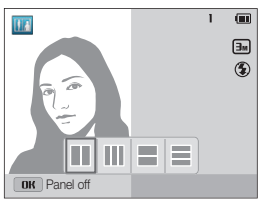
In Split Shot mode, you can capture several photos and arrange them with preset layouts.

1 Rotate the mode dial to .

2 Select .

3 Select a split style.

- To adjust the sharpness of the dividing line, press [**MENU**], and then select **Line Blur** → a desired value.
- To apply a Smart Filter effect to part of the shot, press [**MENU**], and then select **Smart Filter** → a desired option. You can apply different Smart Filter effects to each part of the shot.




4 Align your subject in the frame, and then half-press [**Shutter**] to focus.

5 Press [**Shutter**] to capture a photo.

- Repeat steps 4 and 5 to capture the rest of the photos.
- To recapture a photo, press [↩].

- In Split Shot mode, the resolution is automatically set to 3M or smaller.
- In Split Shot mode, the available zoom range may be less than in other shooting modes.

## Using the Picture-in-Picture mode

In Picture-in-Picture mode, you can capture or select a full-sized background photo, and then insert a smaller photo or video into the foreground.

1 Rotate the mode dial to .

2 Select .

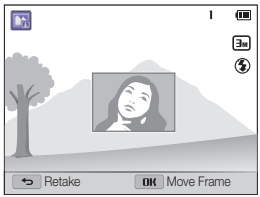
- To set the final video size when inserting a video, press [**MENU**], and then select **Movie Size** → a desired video size.

3 Half-press [**Shutter**] to focus, and then press [**Shutter**] to capture a background photo.

- To select a background photo from your saved photos, press [**MENU**], and then select **Open Image** → a desired photo. You cannot select a video file or a photo captured in Live Panorama mode.

4 Press [**OK**] to set the photo as the background image.

- To recapture a background photo, press [⮌].




5 Press [**OK**], and then press [**DISP**/✿/ϟ/⏲] to change the insertion point.

6 Press [**OK**], and then press [**DISP**/✿/ϟ/⏲] to change the insertion size.

7 Press [**OK**] to save the setting.

8 Half-press [**Shutter**] to focus, and then press [**Shutter**] to capture and insert a photo.

- The insertion window appears larger when you half-press [**Shutter**], so that you can determine whether or not the subject is in focus.
- To record a video, press ◉ (Video recording). To stop recording and insert the video, press ◉ (Video recording) again.

- When capturing background photos, the resolution is automatically set to 3M and all photos captured are saved.
- The final Picture-in-picture photos or videos are saved as one combined file and the inserted photos or videos are not saved separately.
- When inserting an image, the resolution for the combined file is automatically set to 3M.
- When inserting a video, the resolution for the combined file is automatically set to VGA or smaller.
- When capturing a background photo, a vertical photo captured in the vertical position is displayed horizontally without auto rotate.
- The maximum size of the insertion window is 1/4 of the screen, and the aspect ratio stays the same when changing the size.
- The maximum length of video that can be inserted is 20 minutes.
- In Picture-in-Picture mode, the available zoom range may be less than in other shooting modes.
- In Picture-in-Picture mode, you cannot set the Sound Alive options.
- When you select a background photo from your saved photos, black bars may appear at the edges of the image, depending on the aspect ratio.

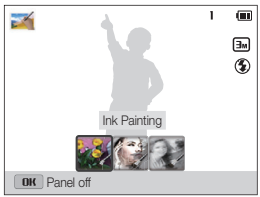
## Using the Artistic Brush mode

In Artistic Brush mode, you can capture a photo, and then view a video that shows how to apply the filter effect.

1 Rotate the mode dial to .

2 Select .

3 Select a filter.




| Option | Description |
|---|---|
| **Ink Painting** | Apply a watercolor painting effect. |
| **Cartoon** | Apply a cartoon painting effect. |
| **Sketch** | Apply a pen sketch effect. |

4 Align your subject in the frame, and then half-press [**Shutter**] to focus.

5 Press [**Shutter**] to capture a photo.

- After capturing the photo, the video that shows how to apply the filter will begin automatically.

- In Artistic Brush mode, the resolution is automatically set to 3M or smaller.
- In Artistic Brush mode, both the photo with the filter effect and the video that shows how to apply the filter effect are saved.
- In Artistic Brush mode, the available zoom range may be less than in other shooting modes.
- In Artistic Brush mode, it may take longer to save files.
- You cannot upload a video captured in Artistic Brush mode via the wireless networking feature on your camera. (WB150F/WB151F/WB152F)

## Using the Photo Filter mode

Apply various filter effects to your photos to create unique images.

Miniature

Vignetting

Fish-eye

Sketch

1 Rotate the mode dial to .

2 Select .

3 Select an effect.

| Option | Description |
|---|---|
| **Miniature** | Apply a tilt-shift effect to make the subject appear in miniature. |
| **Vignetting** | Apply the retro-looking colors, high contrast, and strong vignette effect of Lomo cameras. |
| **Ink Painting** | Apply a watercolor painting effect. |
| **Oil Painting** | Apply an oil painting effect. |
| **Cartoon** | Apply a cartoon painting effect. |
| **Cross Filter** | Add lines that radiate outward from bright objects to imitate the visual effect of a cross filter. |
| **Sketch** | Apply a pen sketch effect. |
| **Soft Focus** | Hide facial imperfections or apply dreamy effects. |
| **Fish-eye** | Blacken the edges of the frame and distort objects to imitate the visual effect of a fisheye lens. |
| **Old Film** | Apply a vintage film effect. |
| **Half Tone Dot** | Apply a halftone effect. |
| **Classic** | Apply a black and white effect. |
| **Retro** | Apply a sepia tone effect. |
| **Zooming Shot** | Blur the edges of a photo to emphasize the subjects in the center. |

4 Align your subject in the frame, and then half-press [**Shutter**] to focus.

5 Press [**Shutter**] to capture a photo.

Depending on the option you select, the resolution may change to 5M or smaller automatically.

## Using the Movie Filter mode

Apply various filter effects to your videos to create unique images.

1 Rotate the mode dial to .

2 Select .

3 Select an effect.

| Option | Description |
|---|---|
| **Miniature** | Apply a tilt-shift effect to make the subject appear in miniature. |
| **Vignetting** | Apply the retro-looking colors, high contrast, and strong vignette effect of Lomo cameras. |
| **Half Tone Dot** | Apply a halftone effect. |
| **Sketch** | Apply a pen sketch effect. |
| **Fish-eye** | Distort close objects to imitate the visual effect of a fisheye lens. |
| **Classic** | Apply a black and white effect. |
| **Retro** | Apply a sepia tone effect. |
| **Palette Effect 1** | Create a vivid look with sharp contrast and strong color. |
| **Palette Effect 2** | Make scenes clean and clear. |
| **Palette Effect 3** | Apply a soft brown tone. |
| **Palette Effect 4** | Create a cold and monotone effect. |

4 Press ● (Video recording) to start recording.

5 Press ● (Video recording) again to stop recording.

- If you select **Miniature**, the miniature recording time is also displayed and is shorter than the real recording time.
- If you select **Miniature**, you cannot record the video sound.
- Depending on the option you select, the recording speed may change to 15 and the recording resolution may change to VGA or smaller automatically.

# Using the Movie mode

In Movie mode, you can customize settings to record HD videos of up to 20 minutes in length. The camera saves recorded videos as MP4 (H.264) files.

- H.264 (MPEG-4 part10/AVC) is a high-compression video format established by the international standards organizations ISO-IEC and ITU-T.
- Some memory cards may not support high definition recording. If your card does not, set a lower resolution.
- Memory cards with slow writing speeds will not support high-resolution videos. To record high-resolution videos, use memory cards with faster write speeds.
- If you activate the OIS function while recording a video, the camera may record the operating sound of the OIS function.
- If you use the zoom function when recording a video, the camera may record the noise of the zoom operating. To decrease zoom noise, use the Sound Alive function. (p. 75)

1 Rotate the mode dial to 🎥.

2 Set desired options.
- For a list of options, refer to "Shooting options". (p. 53)

3 Press ⏺ (Video recording) to start recording.

4 Press ⏺ (Video recording) again to stop recording.

You can start recording a video in some modes by pressing ⏺ (Video recording) without having to rotate the mode dial to 🎥.

## Pause recording

The camera allows you to temporarily pause a video while recording. With this function, you can record separate scenes as a single video.

- Press [**OK**] to pause while recording.
- Press [**OK**] to resume.

## Using the Smart Scene Detection mode

In Smart Scene Detection mode, your camera automatically chooses the appropriate camera settings based on the scene it has detected.

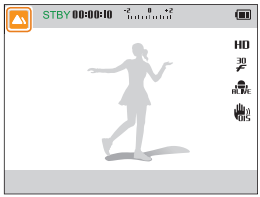
1 Rotate the mode dial to 🎬.

2 Press [**MENU**].

3 Select **Smart Scene Detection** → **On**.

4 Align your subject in the frame.

- The camera automatically selects a scene. An appropriate scene icon will appear at the top left of the screen.




| Icon | Description |
|---|---|
| | Landscapes |
| | Sunsets |
| | Blue skies |
| | Forested areas |

5 Press ● (Video recording) to start recording.

6 Press ● (Video recording) again to stop recording.

- If the camera does not recognize an appropriate scene mode, it uses the default settings for the Smart Scene Detection mode.
- The camera may not select the correct scene depending on the shooting conditions, such as camera shake, lighting, and distance to the subject.

# Shooting options

Learn how to set the options in Shooting mode.


Selecting a resolution and quality ..... 54
- Selecting a resolution ..... 54
- Selecting an image quality ..... 55

Using the timer ..... 56

Shooting in the dark ..... 57
- Preventing red-eye ..... 57
- Using the flash ..... 57
- Adjusting the ISO sensitivity ..... 59

Changing the camera's focus ..... 60
- Using macro ..... 60
- Using auto focus ..... 60
- Focusing on a selected area ..... 62
- Using tracking auto focus ..... 62
- Adjusting the focus area ..... 63

Using Face Detection ..... 64
- Detecting faces ..... 64
- Capturing a self portrait shot ..... 65
- Capturing a smile shot ..... 65
- Detecting eye blinking ..... 66
- Using Smart Face Recognition ..... 66
- Registering faces as your favorites (My Star) ..... 67

Adjusting brightness and color ..... 69
- Adjusting the exposure manually (EV) ..... 69
- Compensating for backlighting (ACB) ..... 70
- Changing the metering option ..... 70
- Selecting a White Balance setting ..... 71

Using burst modes ..... 73

Adjusting images ..... 74

Reducing the sound of the zoom ..... 75

# Selecting a resolution and quality

Learn how to change the image resolution and quality settings.

## Selecting a resolution

As you increase the resolution, your photo or video will include more pixels, so it can be printed on larger paper or displayed on a larger screen. When you use a high resolution, the file size will also increase.

### Setting the photo resolution

SMART P A S M SCN

1 In Shooting mode, press [MENU].

2 Select **Photo Size**.

3 Select an option.

| Icon | Description |
|---|---|
| 14M | **4320 X 3240**: Print on A1 paper. |
| 12MP | **4320 X 2880**: Print on A1 paper in wide ratio (3:2). |
| 10M | **4320 X 2432**: Print on A2 paper in panorama ratio (16:9) or play back on an HDTV. |
| 10M | **3648 X 2736**: Print on A2 paper. |
| 8M | **2832 X 2832**: Print on A3 paper in 1:1 ratio. |
| 5M | **2592 X 1944**: Print on A4 paper. |
| 3M | **1984 X 1488**: Print on A5 paper. |
| 2M | **1920 X 1080**: Print on A5 paper in panorama ratio (16:9) or play back on an HDTV. |
| 1M | **1024 X 768**: Attach to an email. |

### Setting the video resolution

SMART P A S M SCN

1 In Shooting mode, press [MENU].

2 Select **Movie Size**.

3 Select an option.

| Icon | Description |
|---|---|
| HD | **1280 X 720**: HD files to play back on an HDTV. |
| VGA | **640 X 480**: SD files to play back on an analog TV. |
| QVGA | **320 X 240**: Post on a web page. |
| 320 WEB | **For Sharing** (WB150F/WB151F/WB152F only): Post on a website using the wireless network (30 seconds maximum). |

## Selecting an image quality

Set the photo and video quality settings. Higher image quality settings will result in larger file sizes.

### Setting the photo quality

P A S M SCN

The camera compresses and saves the photos you capture in the JPEG format.

1 In Shooting mode, press [MENU].

2 Select **Quality**.

3 Select an option.

| Icon | Description |
|---|---|
| SF | **Super Fine**: Capture photos in super high quality. |
| F | **Fine**: Capture photos in high quality. |
| N | **Normal**: Capture photos in normal quality. |

### Setting the video quality

The camera compresses and saves the videos you record in MP4 (H.264) format.

1 In Shooting mode, press [MENU].

2 Select **Frame Rate**.

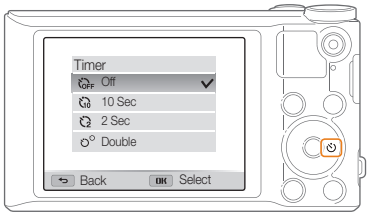
3 Select an option.

| Icon | Description |
|---|---|
| 30 | **30 FPS**: Record 30 frames per second. |
| 15 | **15 FPS**: Record 15 frames per second. |

# Using the timer SMART P A S M SCN

Learn how to set the timer to delay shooting.

1 In Shooting mode, press [⏲].




2 Select an option.

| Icon | Description |
|---|---|
| | **Off**: The timer is not active. |
| | **10 Sec**: Capture a photo after a 10-second delay. |
| | **2 Sec**: Capture a photo after a 2-second delay. |
| | **Double**: Capture one photo after a 10-second delay and another photo after a 2-second delay. |

Available options may differ depending on the shooting conditions.

3 Press [**Shutter**] to start the timer.

- The AF-assist light/timer lamp blinks. The camera will automatically capture a photo after the specified time has elapsed.

- Press [**Shutter**] or [⏲] to cancel the timer.
- Depending on the Face Detection options you selected, the timer function may not be available.
- In some modes, you can also set the timer option by pressing [**MENU**], and then selecting **Timer**.

# Shooting in the dark

Learn how to capture photos at night or in low light conditions.

## Preventing red-eye P SCN

If the flash fires when you capture a photo of a person in the dark, a red glow may appear in the person's eyes. To prevent this, select **Red-eye** or **Red-eye Fix**. Refer to flash options in "Using the flash."

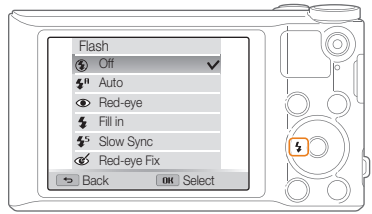
▲ Before correction

▲ After correction

## Using the flash SMART P A S M SCN

Use the flash when you capture photos in the dark or when you need more light in your photos.

1 In Shooting mode, press [⚡].




2 Select an option.

| Icon | Description |
|---|---|
| ⚡ | **Off**:<br>• The flash will not fire.<br>• The camera will display the shake warning when you are shooting in low light. |
| ⚡A | **Auto**: The flash will fire automatically when the subject or background is dark. |

| Icon | Description |
|---|---|
| | **Red-eye**:<br>• The flash will fire twice when the subject or background is dark to reduce the red-eye effect.<br>• There is an interval between the 2 bursts of the flash. Do not move until the flash fires a second time. |
|  | **Fill in**:<br>• The flash always fires.<br>• The camera automatically adjusts light intensity. |
| | **Slow Sync**:<br>• The flash fires and the shutter stays open longer.<br>• This option is recommended when you want to capture more ambient light to reveal more details in the background.<br>• Use a tripod to prevent your photos from blurring.<br>• The camera will display the shake warning when you are shooting in low light. |
| | **Red-eye Fix**:<br>• The flash fires twice when the subject or background is dark. The camera corrects red-eyes through its advanced software analysis.<br>• There is an interval between the 2 bursts of the flash. Do not move until the flash fires a second time. |

Available options may differ depending on the shooting conditions.

- Flash options are not available if you set Burst options or select **Self-Portrait** or **Blink Detection**.
- Make sure that your subjects are within the recommended distance from the flash. (p. 142)
- If light from the flash is reflected or there is a substantial amount of dust in the air, tiny spots may appear in your photo.
- In some modes, you can also set the flash option by pressing [**MENU**], and then selecting **Flash**.

## Adjusting the ISO sensitivity P A S M

The ISO sensitivity is the measure of a film's sensitivity to light as defined by the International Organization for Standardization (ISO). The higher ISO sensitivity you select, the more sensitive to light your camera becomes. Use a higher ISO sensitivity to capture better photos and reduce camera shake when not using the flash.

1 In Shooting mode, press [**MENU**].

2 Select **ISO**.

3 Select an option.

- Select ISO AUTO to use an appropriate ISO sensitivity based on the brightness of the subject and lighting.

Higher ISO sensitivities may result in more image noise.

# Changing the camera's focus

Learn how to adjust the camera's focus to suit the subject and the shooting conditions.

## Using macro P A S M SCN

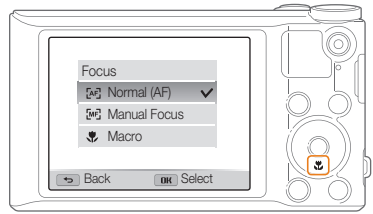
Use macro to capture close-up photos of subjects, such as flowers or insects.

- Try to hold the camera firmly to prevent blurry photos.
- Turn off the flash if the distance to the subject is less than 15.7 in. (40 cm).

## Using auto focus SMART P A S M SCN

To capture sharp photos, select the appropriate focus option according to your distance from the subject.

1 In Shooting mode, press [].



2 Select an option.

| Icon | Description |
|---|---|
| AF | **Normal (AF)**: Focus on a subject farther than 31 in. (80 cm) away. Farther than 138 in. (350 cm) away when you use the zoom. |
| MF | **Manual Focus**: Focus on a subject by adjusting the focus distance manually. (p. 61) |
| | **Macro**: Focus on a subject that is 2-31 in. (5-80 cm) from the camera. 71-138 in. (180-350 cm) when you use the zoom. |
| AM | **Auto Macro**:<br>• Focus on a subject farther than 2 in. (5 cm) away. Farther than 71 in. (180 cm) away when you use the zoom.<br>• It is set automatically in some shooting modes. |

Available options may differ depending on the shooting conditions.

In some modes, you can also set the focus option by pressing [MENU], and then selecting **Focus**.

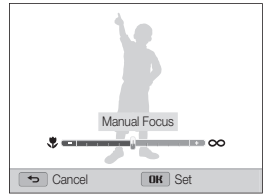
## Adjusting the focus distance manually

P A S M

1 In Shooting mode, press [✿].

2 Select **Manual Focus**.

3 Press [⚡/⏲] to adjust the focus distance.




4 Press [OK] to save your settings.

- When you adjust the focus distance manually and the subject is out of focus, the photo may be blurry.
- If you use this function, you cannot set focus area options and Face Detection options.

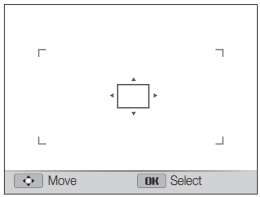
## Focusing on a selected area P A S M

You can focus on an area that you have selected.

1 In Shooting mode, press [**MENU**].

2 Select **Focus Area** → **Selection AF**.

3 Press [**OK**], and then press [**DISP**/✿/ϟ/ⓣ] to move the frame to a desired area.




4 Press [**OK**].

5 Press [**Shutter**] to capture the photo.

- Press [**OK**] to change the focus area.

If you use this function, you cannot set Face Detection options, Timer options, and Intelli zoom.

## Using tracking auto focus P A S M

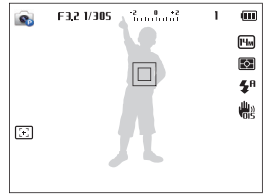
Tracking AF allows you to track and auto focus on your subject, even when you are moving.

1 In Shooting mode, press [**MENU**].

2 Select **Focus Area** → **Tracking AF**.

3 Focus on the subject you want to track, and then press [**OK**].

- A focus frame appears on the subject and follows the subject as you move the camera.




- The white frame means that your camera is tracking the subject.
- When you half-press [**Shutter**], the green frame means that your subject is in focus.

4 Press [**Shutter**] to capture the photo.

- If you do not select a focus area, the focus frame will appear in the center of the screen.
- Tracking a subject may fail when:
  - the subject is too small
  - the subject moves excessively
  - the subject is backlit or you are shooting in a dark place
  - colors or patterns on the subject and the background are the same
  - the subject includes horizontal patterns, such as blinds
  - the camera shakes excessively
- When tracking a subject fails, the focus frame will appear as a white single-line frame (▭).
- If the camera fails to track the subject, you must reselect the subject to track.
- If the camera fails to focus, the focus frame will change to a red single-line frame (▭).
- If you use this function, you cannot set Face Detection options, Timer options, Burst options, and Intelli zoom.

## Adjusting the focus area P A S M

You can get clearer photos by selecting an appropriate focus area according to your subject's location in the scene.

1 In Shooting mode, press [MENU].

2 Select **Focus Area**.

3 Select an option.

| Icon | Description |
|---|---|
| | **Center AF**: Focus on the center of the frame (suitable when subjects are located at or near the center). |
| | **Multi AF**: Focus on one or more of 9 possible areas. |
| | **Selection AF**: Focus on the area that you select. (p. 62) |
| | **Tracking AF**: Focus on and track the subject. (p. 62) |

Available shooting options may differ depending on the shooting mode.

# Using Face Detection P A S M SCN

If you use Face Detection options, your camera can automatically detect a human face. When you focus on a human face, the camera adjusts the exposure automatically. Use **Blink Detection** to detect closed eyes or **Smile Shot** to capture a smiling face. You can also use **Smart Face Recognition** to register faces and prioritize the focus on them.

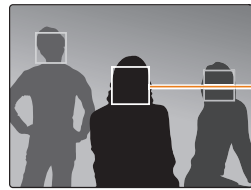
- When your camera detects a face, it tracks the detected face automatically.
- Face Detection may not be effective when:
  - the subject is far from the camera (The focus frame will appear orange for Smile Shot and Blink Detection.)
  - it is too bright or too dark
  - the subject is not facing the camera
  - the subject is wearing sunglasses or a mask
  - the subject's facial expression changes drastically
  - the subject is backlit or the lighting conditions are unstable
- Face Detection is not available when you set the Selection AF, Tracking AF, or Manual Focus.
- Depending on the shooting options you selected, available Face Detection options may differ.
- Depending on the Face Detection options you selected, the timer function may not be available.
- When you set Face Detection options, the AF area is automatically set to Multi AF.
- Depending on the Face Detection options you selected, Burst options may not be available.
- When you set Smart Face Recognition option and capture photos of detected faces, they will be registered in the face list.
- You can view registered faces in order of priority in Playback mode. (p. 79) Even though faces are registered successfully, they may not be classified in Playback mode.
- A face detected with Smart Face Recognition option may not appear in the face list or Smart Album.

## Detecting faces

Your camera automatically detects up to 10 human faces in one scene.

1 In Shooting mode, press [**MENU**].

2 Select **Face Detection** → **Normal**.



The face nearest the camera or nearest the center of the scene appears in a white focus frame and the rest of the faces appear in gray focus frames.

The closer you are to the subjects, the quicker your camera will detect faces.

## Capturing a self portrait shot

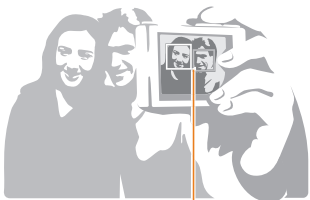
Capture photos of yourself. The camera sets the focus distance to close-up, and then emits a beep when ready.

1 In Shooting mode, press [**MENU**].

2 Select **Face Detection** → **Self-Portrait**.

3 Compose your shot with the lens facing you.

4 When you hear a quick beep, press [**Shutter**].



When faces are located in the center, the camera beeps rapidly.

If you turn **Volume** off in the sound settings, the camera will not emit a beep. (p. 122)

## Capturing a smile shot

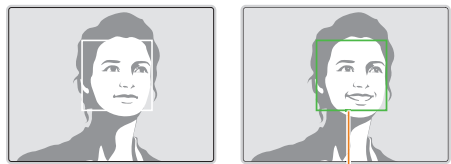
The camera automatically releases the shutter when it detects a smiling face.

1 In Shooting mode, press [**MENU**].

2 Select **Face Detection** → **Smile Shot**.

3 Compose your shot.

- The camera automatically releases the shutter when it detects a smiling face.



When your subject smiles broadly, your camera can detect the smile more easily.

## Detecting eye blinking

If your camera detects closed eyes, it will automatically capture 2 photos in succession.

1 In Shooting mode, press [MENU].

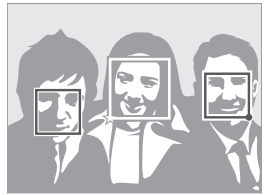
2 Select **Face Detection** → **Blink Detection**.

## Using Smart Face Recognition

The camera automatically registers faces that you frequently photograph. The Smart Face Recognition feature will automatically prioritize the focus on those faces and on favorite faces. The Smart Face Recognition feature is available only when you use a memory card.

1 In Shooting mode, press [MENU].

2 Select **Face Detection** → **Smart Face Recognition**.



- : Faces that you have registered as favorites.
  (To register faces as favorites, refer to page 67.)
- : Faces that the camera has automatically registered.

- The camera may recognize and register faces incorrectly depending on lighting conditions, drastic changes in the subject's pose or face, and whether or not the subject is wearing glasses.
- The camera can automatically register up to 12 faces. If the camera recognizes a new face when 12 faces have already been registered, it will replace the lowest priority face with the new one.

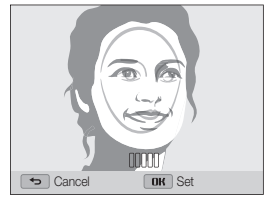
## Registering faces as your favorites (My Star)

You can register your favorite faces to prioritize the focus and exposure on those faces. This feature is available only when you use a memory card.

1 In Shooting mode, press [**MENU**].

2 Select **Smart FR Edit** → **My Star**.

3 Align your subject's face with the oval guideline, and then press [**Shutter**] to register the face.




- Capture photos of one person at a time when registering faces.
- Capture 5 photos of the subject's face for best results: one each from the front, left, right, above, and below.
- When capturing photos from the left, right, above, and below, instruct the subject not to turn his or her face more than 30 degrees.
- You can register a face even if you capture only one photo of the subject's face.

4 When you are finished capturing the photos, the face list appears.

- Your favorite faces are indicated with a ★ on the face list.

- You can register up to 8 favorite faces.
- The flash will not fire when you register a favorite face.
- If you register the same face twice, you can delete one of the faces in the face list.

## Viewing your favorite faces

1 In Shooting mode, press [**MENU**].

2 Select **Smart FR Edit** → **Face List**.

- To change the ranking of your favorite faces, press [**MENU**], and then select **Edit Ranking**. (p. 78)
- To delete a favorite face, press [**MENU**], and then select **Cancel My Star**. (p. 79)

# Adjusting brightness and color

Learn how to adjust the brightness and color for better image quality.

## Adjusting the exposure manually (EV)

P A S

Depending on the intensity of the ambient light, your photos may be too bright or dark. In these cases, you can adjust the exposure to get a better photo.

▲ Darker (-)

▲ Neutral (0)

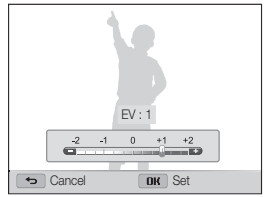
▲ Brighter (+)

1 In Shooting mode, press [**MENU**].

2 Select **EV**.

3 Select a value to adjust the exposure.

- The photo will be brighter as the exposure value increases.




4 Press [**OK**] to save your settings.

- Once you adjust the exposure, the setting will be stored automatically. You may need to change the exposure value later to avoid overexposure or underexposure.
- If you cannot decide on an appropriate exposure, select the **AEB** (Auto Exposure Bracket) option. The camera will capture 3 consecutive photos, each with a different exposure: normal, underexposed, and overexposed. (p. 73)

## Compensating for backlighting (ACB) P A S M

When the light source is behind your subject or there is high contrast between your subject and the background, your subject is likely to appear dark in the photo. In this case, set the Auto Contrast Balance (ACB) option.

▲ Without ACB

▲ With ACB

1 In Shooting mode, press [MENU].

2 Select **ACB**.

3 Select an option.

| Icon | Description |
|---|---|
| OFF | **Off**: ACB (Auto Contrast Balance) is deactivated. |
| ACB | **On**: ACB (Auto Contrast Balance) is activated. |

- The ACB feature is always on in Smart Auto mode.
- The ACB feature is not available when you set Burst options.

## Changing the metering option P A S M

The metering mode refers to the way in which a camera measures the quantity of light. The brightness and lighting of your photos will vary depending on the metering mode you select.

1 In Shooting mode, press [MENU].

2 Select **Metering**.

3 Select an option.

| Icon | Description |
|---|---|
| | **Multi**:<br>• Your camera divides the frame into several areas, and then measures the light intensity of each area.<br>• Suitable for general photos. |
| | **Spot**:<br>• Your camera measures only the light intensity at the very center of the frame.<br>• If a subject is not in the center of the frame, your photo may be improperly exposed.<br>• Suitable for a subject with backlighting. |
| | **Center-weighted**:<br>• Your camera averages the meter reading of the entire frame with emphasis placed on the center.<br>• Suitable for photos with subjects in the center of the frame. |

## Selecting a White Balance setting P A S M

The color of your photo depends on the type and quality of the light source. If you want the color of your photo to be realistic, select a White Balance setting that is appropriate for the lighting conditions, such as Auto WB, Daylight, Cloudy, or Tungsten.

AWB Auto WB

Daylight

Cloudy

Tungsten

1 In Shooting mode, press [**MENU**].

2 Select **White Balance**.

3 Select an option.

| Icon | Description |
|---|---|
| AWB | **Auto WB**: Automatically set the White Balance based on the lighting conditions. |
| | **Daylight**: For outdoor photos on a sunny day. |
| | **Cloudy**: For outdoor photos on a cloudy day or in shadows. |
| | **Fluorescent_H**: For shooting under a daylight fluorescent or 3-way fluorescent light. |
| | **Fluorescent_L**: For shooting under white fluorescent light. |
| | **Tungsten**: For shooting indoor photos under incandescent bulbs or halogen lamps. |
| | **Custom Set**: To use White Balance settings that you define. (p. 72) |
| K | **Color Temp.**: To adjust the color temperature of the light source. (p. 72) |

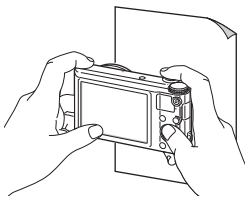
## Defining your own White Balance

You can customize the White Balance by capturing a photo of a white surface, such as a piece of paper, under the lighting conditions in which you intend to capture a photo. The White Balance feature will help you to match the colors in your photo with the actual scene.

1 In Shooting mode, press [**MENU**].

2 Select **White Balance** → **Custom Set**.

3 Aim the lens at a piece of white paper, and then press [**Shutter**].



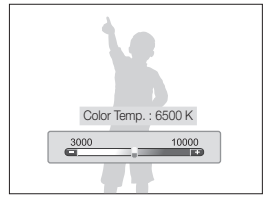
## Adjusting color temperature

1 In Shooting mode, press [**MENU**].

2 Select **White Balance** → **Color Temp.**

3 Press [**⚡**/**⏲**] to adjust the color temperature to match your light source.

- You can capture a warmer photo with a higher color temperature setting (more yellow/red), and a cooler photo with a lower color temperature setting (more blue).




4 Press [**OK**] to save your settings.

# Using burst modes P A S M

It can be difficult to capture photos of fast-moving subjects or capture natural facial expressions and gestures of your subjects in photos. Also, it can be difficult to adjust the exposure correctly and select a proper light source. In these cases, select one of the burst modes.

1 In Shooting mode, press [**MENU**].

2 Select **Drive**.

3 Select an option.

| Icon | Description |
|---|---|
| | **Single**: Capture a single photo. |
| | **Continuous**:<br>• While you are pressing [**Shutter**], the camera continuously captures photos.<br>• The maximum number of photos depends on the capacity of your memory card. |
| | **Motion Capture**: While you are pressing [**Shutter**], the camera captures VGA photos (5 photos per second; maximum of 30 photos). |
| | **AEB**:<br>• Capture 3 consecutive photos, each with a different exposure: normal, underexposed, and overexposed.<br>• Use a tripod to prevent blurry photos. |

- You can use the flash and timer only when you select **Single**.
- When you select **Motion Capture**, your camera will set the resolution to VGA and set the ISO sensitivity to **Auto**.
- Depending on the Face Detection option you selected, some Burst options may not be available.

# Adjusting images P A S M

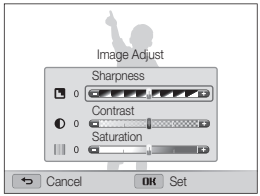
Adjust the sharpness, contrast, or saturation of your photos.

1 In Shooting mode, press [**MENU**].

2 Select **Image Adjust**.

3 Select an option.

- Sharpness
- Contrast
- Saturation




4 Press [⚡/⏲] to adjust each value.

| Sharpness | Description |
|---|---|
| - | Soften the edges on your photos (suitable for editing the photos on your computer). |
| + | Sharpen the edges to improve the clarity of your photos. This may also increase the noise in your photos. |

| Contrast | Description |
|---|---|
| - | Decrease the color and brightness. |
| + | Increase the color and brightness. |

| Saturation | Description |
|---|---|
| - | Decrease the saturation. |
| + | Increase the saturation. |

5 Press [**OK**] to save your settings.

Select 0 if you do not want to apply any effects (suitable for printing).

# Reducing the sound of the zoom P A S M SCN

When you use the zoom while recording videos, the camera can record the sound of the zoom. Use the Sound Alive function to reduce the zoom noise.

1 In Shooting mode, press [**MENU**].

2 Select **Voice**.

3 Select an option.

| Icon | Description |
|---|---|
| | **Sound Alive On**: Turn on the Sound Alive function to reduce the zoom noise. |
| | **Sound Alive Off**: Turn off the Sound Alive function. The camera can record the zoom noise. |
| | **Mute**: Do not record sounds. |

- Do not block the microphone when you use the Sound Alive function.
- Recordings made with Sound Alive may differ from actual sounds.
- In Picture-in-Picture mode, you cannot set the Sound Alive options.

# Playback/Editing

Learn how to play back photos or videos, and edit photos or videos. Also, learn how to connect your camera to your computer, photo printer, or TV.


Viewing photos or videos in Playback mode ..... 77
- Starting Playback mode ..... 77
- Viewing photos ..... 83
- Playing a video ..... 85

Editing a photo ..... 87
- Resizing photos ..... 87
- Rotating a photo ..... 87
- Applying Smart Filter effects ..... 88
- Adjusting your photos ..... 89
- Creating a print order (DPOF) ..... 90

Viewing files on a TV ..... 91

Transferring files to your Windows computer ..... 92
- Transferring files with Intelli-studio ..... 93
- Transferring files by connecting the camera as a removable disk ..... 95
- Disconnecting the camera (for Windows XP) ..... 96

Transferring files to your Mac computer ... 97

Printing photos with a PictBridge photo printer ..... 98

# Viewing photos or videos in Playback mode

Learn how to play back photos or videos and how to manage files.

## Starting Playback mode

View photos or play videos stored in your camera.

1 Press [▶].

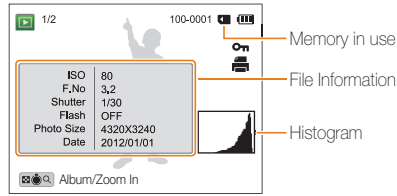
- The most recent file will be displayed.
- If the camera is off, it will turn on and display the most recent file.

2 Press [ϟ/⏲] to scroll through files.

- Press and hold [ϟ/⏲] to scroll through files quickly.

- If you want to view files stored in the internal memory, remove your memory card.
- You may not be able to edit or play back files that were captured with other cameras, due to unsupported sizes (image size, etc) or codecs. Use a computer or another device to edit or play back these files.

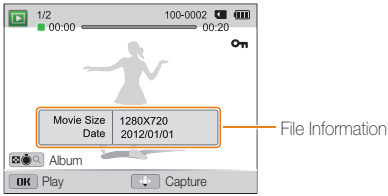
### Photo file information




| Icon | Description |
|---|---|
| 1/2 | Current file/Total files |
| 100-0001 | Folder name–File name |
| | Protected file |
| | Print order has been set (DPOF) |

To display file information on the screen, press [**DISP**].

## Video file information




| Icon | Description |
|---|---|
| 1/2 | Current file/Total files |
| 100-0002 | Folder name-File name |
| 00:00 | Current playback time |
| 00:20 | Video length |
| | Protected file |

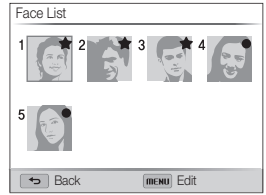
To display file information on the screen, press [**DISP**].

## Ranking your favorite faces

You can rank your favorite faces. The favorite face feature is available only when you insert a memory card into the camera.

1 In Playback mode, press [**MENU**].

2 Select **Face List**.




3 Press [**MENU**].

4 Select **Edit Ranking**.

5 Select a face, and then press [**OK**].

6 Press [⚡/⏲] to change the ranking of the face, and then press [⮌].

## Deleting favorite faces

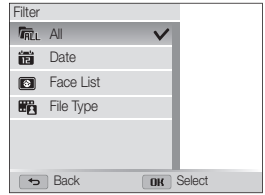
You can delete your favorite faces. The favorite face feature is available only when you insert a memory card into the camera.

1. In Playback mode, press [**MENU**].
2. Select **Face List**.
3. Press [**MENU**].
4. Select **Cancel My Star**.
5. Select a face, and then press [**OK**].
6. Press [🗑].
7. When the pop-up message appears, select **Yes**.

## Viewing files by category in Smart Album

View files by category, such as date, face, or file type.

1. In Playback mode, rotate [**Zoom**] to the left.
2. Press [**MENU**].
3. Select **Filter** → a category.




| Icon | Description |
|---|---|
| | **All**: View files normally. |
| | **Date**: View files by the date they were saved. |
| | **Face List**: View files by recognized faces and favorite faces. (Up to 20 people) |
| | **File Type**: View files by the file type. |

4 Scroll to a desired list, and then press [**OK**] to open the list.

5 Scroll to a desired file, and then press [**OK**] to view the file.

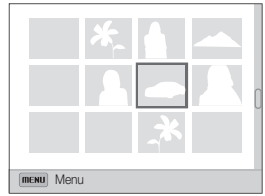
6 Rotate [**Zoom**] to the left to return to the previous view.

It may take some time for the camera to open Smart Album, change the category, or reorganize files.

## Viewing files as thumbnails

Scan thumbnails of files.

In Playback mode, rotate [**Zoom**] to the left to view thumbnails (12 at a time). Rotate [**Zoom**] to the left once more to display more thumbnails (24 at a time). Rotate [**Zoom**] to the right to return to the previous view.




Press [**DISP**/✿/ϟ/⏲] to scroll through files.

## Protecting files

Protect your files from accidental deletion.

1 In Playback mode, press [**MENU**].

2 Select **Protect** → **On**.

You cannot delete or rotate a protected file.

## Deleting files

Select files to delete in Playback mode.

### Deleting a single file

You can select one file, and then delete it.

1 In Playback mode, select a file, and then press [ ].

2 When the pop-up message appears, select **Yes**.

You can also delete files in Playback mode by pressing [**MENU**], and then selecting **Delete** → **Delete** → **Yes**.

### Deleting multiple files

You can select multiple files, and then delete them at once.

1 In Playback mode, press [🗑].
- When in thumbnails view, press [MENU], select **Delete** → **Select**, and then skip to step 3, or press [🗑], select **Select**, and then skip to step 3.

2 When the pop-up message appears, select **Multiple Delete**.

3 Scroll to each file you want to delete, and then press [OK].
- Press [OK] again to cancel your selection.

4 Press [🗑].

5 When the pop-up message appears, select **Yes**.

### Deleting all files

You can select all files, and then delete them at once.

1 In Playback mode, press [MENU].
- When in thumbnails view, press [MENU], select **Delete** → **Delete All**, and then skip to step 3, or press [🗑], select **Delete All**, and then skip to step 3.

2 Select **Delete** → **Delete All**.

3 When the pop-up message appears, select **Yes**.
- All unprotected files are deleted.

## Copying files to a memory card

Copy files from the internal memory to a memory card.

1 In Playback mode, press [MENU].

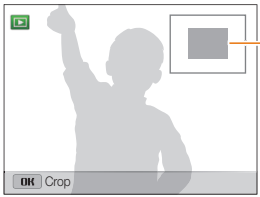
2 Select **Copy to Card**.

# Viewing photos

Enlarge part of a photo or view photos as a slide show.

## Enlarging a photo

In Playback mode, rotate [**Zoom**] to the right to enlarge a portion of the photo. Rotate [**Zoom**] to the left to zoom out.




Enlarged area

| To | Description |
|---|---|
| Move the enlarged area | Press [**DISP**/ /  / ]. |
| Trim the enlarged photo | Press [**OK**], and then select **Yes**. (The trimmed photo will be saved as a new file. The original photo is retained in its original form.) |

When you view photos that were captured by another camera, the zoom ratio may differ.

## Viewing panoramic photos

View photos captured in Live Panorama mode.

1 In Playback mode, press [▼/⏲] to scroll to a desired panoramic photo.
- The entire panoramic photo appears on the screen.

2 Press [**OK**].
- The camera automatically scrolls through the photo from left to right for a horizontal panoramic photo and from top to bottom for a vertical panoramic photo. The camera then switches to Playback mode.
- While playing back a panoramic photo, press [**OK**] to pause or resume.
- After you have paused the playback of a panoramic photo, press [**DISP**/✿/▼/⏲] to move the photo horizontally or vertically, depending on the direction you moved when capturing the photo.

3 Press [⮌] to return to Playback mode.

The camera automatically scrolls through the panoramic photo only if the longest side of the photo is two or more times longer than the shortest side.

## Playing a slide show

Apply effects and audio to a slide show of your photos. The slide show function does not work for videos.

1 In Playback mode, press [**MENU**].

2 Select **Slide Show Options**.

3 Select a slide show effect option.
- Skip to step 4 to start a slide show with no effects.

* Default

| Option | Description |
|---|---|
| Play Mode | Set whether or not to repeat the slide show. (**One Play***, **Repeat**) |
| Interval | • Set the interval between photos. (**1 sec***, **3 sec**, **5 sec**, **10 sec**)<br>• You must set the Effect option to **Off** to set the interval. |
| Music | Set background audio. |
| Effect | • Set a scene change effect between photos. (**Off**, **Calm***, **Shine**, **Relax**, **Lively**, **Sweet**)<br>• Select **Off** to cancel effects.<br>• When you use the Effect option, the interval between photos will be set to 1 second. |

4 Press [⮌].

5 Select **Start Slide Show**.

6 View the slide show.

- Press [**OK**] to pause the slide show.
- Press [**OK**] again to resume the slide show.

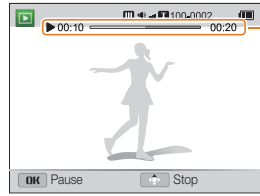
- Press [**OK**], and then press [ϟ/⏲] to stop the slide show and return to Playback mode.
- Rotate [**Zoom**] to the left or right to adjust the volume level.

## Playing a video

In Playback mode, you can view a video, and then capture or trim parts of the playing video. You can save the captured or trimmed segments as new files.

1 In Playback mode, select a video, and then press [**OK**].

2 View the video.




Current playback time/ Video length

| To | Description |
|---|---|
| Scan backward | Press [ϟ]. Each time you press [ϟ], you change the scan speed in this order: 2X, 4X, 8X. |
| Pause or resume playback | Press [**OK**]. |
| Scan forward | Press [⏲]. Each time you press [⏲], you change the scan speed in this order: 2X, 4X, 8X. |
| Adjust the volume level | Rotate [**Zoom**] to the left or right. |

## Trimming a video

1. In Playback mode, select a video, and then press [**MENU**].
2. Select **Trim Movie**.
3. Press [**OK**] to start playing the video.
4. Press [**OK**] → [] at the point where you want the trimming to begin.
5. Press [**OK**] to resume playing the video.
6. Press [**OK**] → [] at the point where you want the trimming to end.
7. Press [] to trim.
8. When the pop-up message appears, select **Yes**.

- The original video should be at least 10 seconds long.
- The camera will save the edited video as a new file and leave the original video intact.

## Capturing an image from video

1. While viewing a video, press [**OK**] at the point where you want to capture an image.
2. Press [].

- The resolution of the captured image will be the same as the original video.
- The captured image is saved as a new file.

# Editing a photo

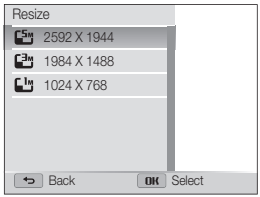
Learn how to edit photos.

- The camera will save edited photos as new files.
- When you edit photos, the camera will automatically convert them to a lower resolution. Photos that you rotate or resize manually are not automatically converted to a lower resolution.

## Resizing photos

Change the size of a photo and save it as a new file.

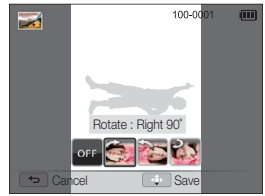
1. In Playback mode, select a photo, and then press [**MENU**].
2. Select **Resize**.
3. Select an option.




Available resize options differ depending on the original size of the photo.

## Rotating a photo

1. Rotate the mode dial to .
2. Select .
3. Rotate [**Zoom**] to the left, and then select a photo.
4. Select **Rotate** → an option.
5. Press [] to save.




- The camera will overwrite the original file.
- In Playback mode, press [**MENU**], and then select **Rotate** to rotate a photo.

## Applying Smart Filter effects

Apply special effects to your photos.

1 Rotate the mode dial to .

2 Select .

3 Rotate [**Zoom**] to the left, and then select a photo.

4 Select **Smart Filter** → an option.

| Option | Description |
|---|---|
| **Normal** | No effect |
| **Miniature** | Apply a tilt-shift effect to make the subject appear in miniature. |
| **Vignetting** | Apply the retro-looking colors, high contrast, and strong vignette effect of Lomo cameras. |

| Option | Description |
|---|---|
| **Ink Painting** | Apply a watercolor painting effect. |
| **Oil Painting** | Apply an oil painting effect. |
| **Cartoon** | Apply a cartoon painting effect. |
| **Cross Filter** | Add lines that radiate outward from bright objects to imitate the visual effect of a cross filter. |
| **Sketch** | Apply a pen sketch effect. |
| **Soft Focus** | Hide facial imperfections or apply dreamy effects. |
| **Fish-eye** | Distort close objects to imitate the visual effect of a fisheye lens. |
| **Old Film** | Apply a vintage film effect. |
| **Half Tone Dot** | Apply a halftone effect. |
| **Classic** | Apply a black and white effect. |
| **Retro** | Apply a sepia tone effect. |
| **Zooming Shot** | Blur the edges of a photo to emphasize the subjects in the center. |

5 Press [] to save.

## Adjusting your photos

Learn how to adjust the brightness, contrast, or saturation or how to correct the red-eye effect. If the center of a photo is dark, you can adjust it to be brighter. The camera will save an edited photo as a new file, but may convert it to a lower resolution.

- You can adjust brightness, contrast, and saturation and apply Smart Filter effects at the same time.
- You cannot apply the ACB, Face Retouch, and Red-eye Fix effects at the same time.

### Adjusting brightness, contrast, or saturation

1 Rotate the mode dial to .

2 Select .

3 Rotate [**Zoom**] to the left, and then select a photo.

4 Select an adjusting option.

| Icon | Description |
|---|---|
| | Brightness |
| | Contrast |
| | Saturation |

5 Press [ / ] to adjust the option.

6 Press [**OK**].

7 Press [ ] to save.

### Adjusting dark subjects (ACB)

1 Rotate the mode dial to .

2 Select .

3 Rotate [**Zoom**] to the left, and then select a photo.

4 Select **ACB**.

5 Press [ ] to save.

### Retouching faces

1 Rotate the mode dial to .

2 Select .

3 Rotate [**Zoom**] to the left, and then select a photo.

4 Select **Face Retouch**.

5 Press [/] to adjust the option.

- As the number increases, the skin tone becomes brighter and smoother.

6 Press [] to save.

### Removing red-eye

1 Rotate the mode dial to .

2 Select .

3 Rotate [**Zoom**] to the left, and then select a photo.

4 Select **Red-eye Fix**.

5 Press [] to save.

## Creating a print order (DPOF)

Select photos to print and save print options in the Digital Print Order Format (DPOF). This information is saved in the MISC folder on your memory card for convenient printing on DPOF-compatible printers.

1 In Playback mode, select a photo you want to print, and then press [**MENU**].

2 Select **DPOF**.

3 Press [**DISP**/] to select the number of copies, and then press [**OK**].

- You can take the memory card to a print shop that supports DPOF (Digital Print Order Format) or you can print photos directly through a DPOF-compatible printer at home.
- Photos with dimensions that are wider than the paper may be cut off on the left and right edges. Ensure that your photo dimensions are compatible with the paper you select.
- You cannot set DPOF options for photos stored in the internal memory.
- If you specify the print size, you can print photos only with DPOF 1.1-compatible printers.

# Viewing files on a TV

Play back photos or videos by connecting your camera to a TV with the A/V cable.

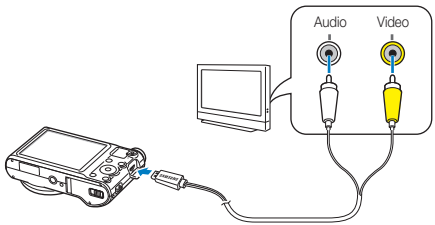
1 Rotate the mode dial to ⚙.

2 Select **Connectivity** → **Video Out**.

3 Select the video signal output for your country or region. (p. 123)

4 Turn off your camera and TV.

5 Connect your camera to your TV with the A/V cable.




6 Turn on your TV, and then select the A/V video source with the TV remote control.

7 Turn on your camera.

- The camera automatically enters into Playback mode when you connect it to a TV.

8 View photos or play videos using the camera buttons.

- Depending on the TV model, you may see some digital noise or part of an image may not appear.
- Images may not be centered on the TV screen depending on your TV settings.

# Transferring files to your Windows computer

Transfer files to your Windows computer, edit them with Intelli-studio, and upload them to the web.

## Requirements

| Item | Requirements |
|---|---|
| CPU | Intel® Pentium®4 3.2 GHz or higher/<br>AMD Athlon™ FX 2.6 GHz or higher |
| RAM | Minimum 512 MB RAM (1 GB or more recommended) |
| OS* | Windows XP SP2, Windows Vista, or Windows 7 |
| Hard disk capacity | 250 MB or more (1 GB and above recommended) |
| Others | • CD-ROM drive<br>• 1024 X 768 pixels, 16-bit color display compatible monitor (1280 X 1024 pixels, 32-bit color display recommended)<br>• USB 2.0 port<br>• nVIDIA Geforce 7600GT or higher/ ATI X1600 series or higher<br>• Microsoft DirectX 9.0c or higher |

* A 32-bit version of Intelli-studio will be installed—even on 64-bit editions of Windows XP, Windows Vista, and Windows 7.

- The requirements are recommendation only. Intelli-studio may not work properly even when the computer meets the requirements, depending on the condition of your computer.
- If your computer does not meet the requirements, videos may not play correctly or it may take longer to edit videos.
- Install DirectX 9.0c or later before you use Intelli-studio.
- Your computer must be running Windows XP, Windows Vista, or Windows 7 for you to connect the camera as a removable disk.

The manufacturer is not responsible for any damage that results from using unqualified computers such as a computer you assembled yourself.

## Transferring files with Intelli-studio

You can download Intelli-studio from the linked webpage and install it on your computer. When you connect the camera to a computer with Intelli-studio installed, the program will launch automatically.

The battery will charge while the camera is connected to a computer with the USB cable.

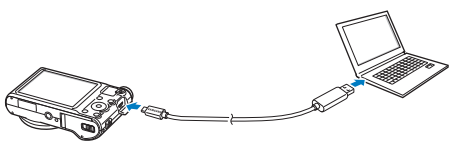
1 Rotate the mode dial to ⚙.

2 Select **Connectivity** → **PC Software** → **On**.

3 Turn off the camera.

4 Connect the camera to your computer with the USB cable.

You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.



5 Turn on the camera.

- When the Intelli-studio installation pop-up appears on the computer screen, follow the on-screen instructions to complete the installation.
- Once the Intelli-studio is installed on your computer, the computer recognizes the camera and launches the Intelli-studio automatically.

If you set the USB option to **Select Mode**, select **Computer** in the pop-up window.

6 Select a destination folder on your computer, and then select **Yes**.

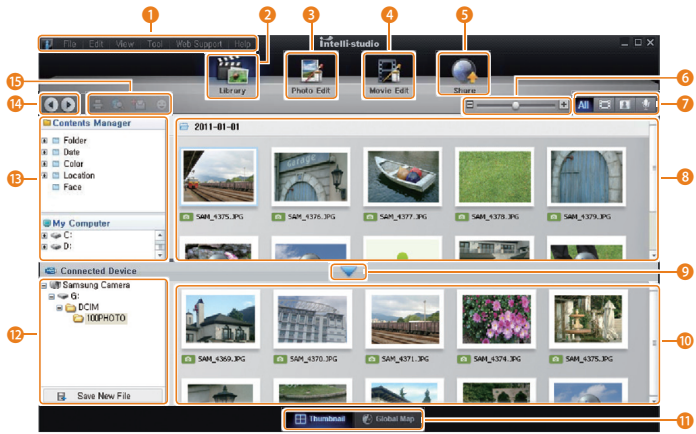
- New files stored on the camera will automatically transfer to the selected folder.
- If your camera has no new files, the pop-up window for saving new files will not appear.

For Windows Vista and Windows 7, select **Run iLinker.exe** from the Auto Play window to start Intelli-studio. If **Run iLinker.exe** does not appear on the computer, click → **Computer** → **Intelli-studio**, and then follow the on-screen instructions to complete the Intelli-studio installation.

## Using Intelli-studio

Intelli-studio allows you to play back and edit files. For details, select **Help** → **Help** from the program toolbar.

- You can update the firmware of your camera by selecting **Web Support** → **Upgrade firmware for the connected device** from the program toolbar.
- You cannot edit files directly on the camera. Transfer files to a folder on your computer before editing.
- Intelli-studio supports the following formats:
  - Videos: MP4 (Video: H.264, Audio: AAC), WMV (WMV 7/8/9), AVI (MJPEG)
  - Photos: JPG, GIF, BMP, PNG, TIFF



| No. | Description |
|---|---|
| 1 | Open menus. |
| 2 | Display files in the selected folder. |
| 3 | Switch to the Photo edit mode. |
| 4 | Switch to the Video edit mode. |
| 5 | Switch to the Sharing mode (to send files by email or upload files to websites, such as Flickr or YouTube). |
| 6 | Enlarge or reduce the thumbnails in the list. |
| 7 | Select a file type. |
| 8 | View files in the selected folder on your computer. |
| 9 | Show or hide files on the connected camera. |
| 10 | View files in the selected folder on the camera. |
| 11 | View files as thumbnails or on a map. |
| 12 | Browse folders stored on the camera. |
| 13 | Browse folders stored on your computer. |
| 14 | Move to the previous or next folder. |
| 15 | Print files, view files on a map, store files in My Folder, or register faces. |

## Transferring files by connecting the camera as a removable disk

Connect the camera to your computer as a removable disk.

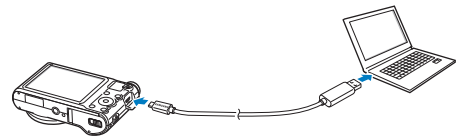
1 Rotate the mode dial to ⚙.

2 Select **Connectivity** → **PC Software** → **Off**.

3 Turn off the camera.

4 Connect the camera to your computer with the USB cable.

> ⚠ You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.



5 Turn on the camera.
- The computer recognizes the camera automatically.

If you set the USB option to **Select Mode**, select **Computer** in the pop-up window.

6 On your computer, select **My Computer** → **Removable Disk** → **DCIM** → **100PHOTO**.

7 Drag or save files to your computer.

## Disconnecting the camera (for Windows XP)

With Windows Vista and Windows 7, the methods for disconnecting the camera are similar.

1 Verify that the status lamp is not blinking.
- The status lamp blinks when transferring files. Wait until it stops.

2 Click on the tool bar at the bottom right of your computer screen.

3 Click the pop-up message.

4 Click the message box that indicates the camera can be removed safely.

5 Remove the USB cable.

The camera may not disconnect safely while Intelli-studio is running. End the program before disconnecting the camera.

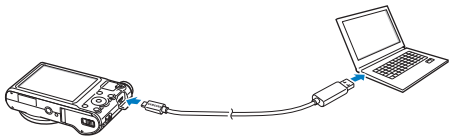
# Transferring files to your Mac computer

When you connect the camera to a Macintosh computer, the computer will automatically recognize the device. You can transfer files directly from the camera to the computer without installing any programs.

Mac OS 10.4 or later is supported.

1 Connect your camera to a Macintosh computer with the USB cable.

You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.



2 Turn on the camera.

- The computer recognizes the camera automatically and displays a removable disk icon.

If you set the USB option to **Select Mode**, select **Computer** in the pop-up window.

3 Double-click the removable disk icon.

4 Drag or save files to your computer.

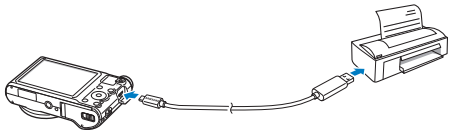
# Printing photos with a PictBridge photo printer

Print photos with a PictBridge-compatible printer by connecting your camera directly to the printer.

1 Rotate the mode dial to ⚙.

2 Select **Connectivity** → **USB** → **Printer**.

3 Turn on the printer, and then connect your camera to the printer with the USB cable.



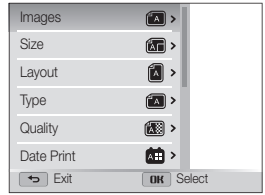
4 If the camera is off, press [**POWER**] or [▶] to turn it on.
- The printer recognizes the camera automatically.

5 Press [ϟ/⏲] to select a file to print.
- Press [**MENU**] to set printing options. See “Configuring print settings.”

6 Press [**OK**] to print.
- Printing starts. Press [**OK**] to cancel printing.

## Configuring print settings

Press [**MENU**] to configure print settings.




| Option | Description |
|---|---|
| Images | Select whether to print the current photo or all photos. |
| Size | Set the print size. |
| Layout | Set the number of photos to be printed on a single sheet of paper. |
| Type | Set the type of paper. |
| Quality | Set the print quality. |
| Date Print | Set to print the date. |
| File Name | Set to print the file name. |
| Reset | Reset settings to their default values. |

Some options may not be supported by some printers.

# Wireless network (WB150F/WB151F/WB152F only)

Learn how to connect to wireless local area networks (WLANs) and use functions.


Connecting to a WLAN and configuring network settings ..... 100
- Connecting to a WLAN ..... 100
- Using the login browser ..... 101
- Network connection tips ..... 102
- Entering text ..... 103

Using photo or video sharing websites ..... 104
- Accessing a website ..... 104
- Uploading photos or videos ..... 104

Sending photos or videos via email ..... 106
- Changing email settings ..... 106
- Sending photos or videos via email ..... 107

Sending photos or videos to a smart phone ..... 109

Using a smart phone as a remote shutter release ..... 110

Uploading photos to a cloud server ..... 112

Using Auto Backup to send photos or videos ..... 113
- Installing the program for Auto Backup on your PC ..... 113
- Sending photos or videos to a PC ..... 113

Viewing photos or videos on a TV Link-enabled TV ..... 115

Sending photos using Wi-Fi Direct ..... 117

About the Wake on LAN (WOL) feature ..... 118

# Connecting to a WLAN and configuring network settings

Learn to connect via an access point (AP) when you are in a range of a WLAN. You can also configure network settings.

## Connecting to a WLAN

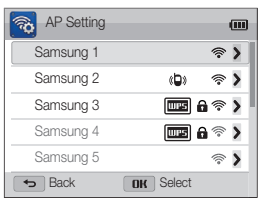
1 Rotate the mode dial to **Wi-Fi**.

2 Select , , , , or .

3 Press [**MENU**], and then select **AP Setting**.

- In some modes, press [**MENU**] or follow the on-screen instructions until the AP Setting screen appears.
- The camera automatically searches for available AP devices.

4 Select an AP.




- Select **WPS PBC** to connect to a WPS AP.
- Select **Refresh** to refresh connectable APs.
- Select **Add wireless network** to add an AP manually.

| Icon | Description |
|---|---|
| | Ad hoc AP |
| | Secured AP |
| | WPS AP |
| | Signal strength |
| | Press [ ] to open AP setting options |

- When you select a secured AP, a pop-up window appears. Enter the required passwords to connect to the WLAN. For information about entering text, refer to "Entering text". (p. 103)
- When a login page appears, refer to "Using the login browser". (p. 101)
- When you select an unsecured AP, the camera will connect to the WLAN.
- If you select a WPS profile supported AP, select **WPS PIN**, and then enter a PIN on the AP device. You can also connect to a WPS profile supported AP by selecting **WPS PBC** on the camera, and then pushing the **WPS** button on the AP device.

### Setting network options

1 In the AP Setting screen, move to an AP, and then press [⏲].

2 Select each option, and then enter the required information.

| Option | Description |
|---|---|
| Authentication | Select a network authentication type. |
| Data Encryption | Select an encryption type. |
| Network Password | Enter the network password. |
| IP Setting | Set the IP address manually. |

### Manually setting the IP address

1 In the AP Setting screen, move to an AP, and then press [⏲].

2 Select **IP Setting** → **Manual**.

3 Select each option, and then enter the required information.

| Option | Description |
|---|---|
| IP | Enter the static IP address. |
| Subnet Mask | Enter the subnet mask. |
| Gateway | Enter the gateway. |
| DNS Server | Enter the DNS address. |

## Using the login browser

You can enter your login information via the login browser when connecting to some APs, sharing sites, or cloud servers.

| Button | Description |
|---|---|
| [DISP/🌷/ϟ/⏲] | Move to an item or scroll the page. |
| [OK] | Select an item. |
| [MENU] | Access the following options:<br>• **Previous Page**: Move to the previous page.<br>• **Next Page**: Move to the next page.<br>• **Reload**: Reload the page.<br>• **Stop**: Stop loading the page.<br>• **Exit**: Close the login browser. |
| [⮌] | Close the login browser. |

- You cannot select some items depending on the page you connected to. This does not indicate a malfunction.
- The login browser may not close automatically after you log into some pages. If this occurs, close the login browser by pressing [⮌], and then proceed with the desired operation.
- It may take longer to load the login page due to the page size or network speed. If this occurs, wait until the login information input window appears.

## Network connection tips

- The quality of the network connection will be determined by the AP.
- The further the distance between your camera and the AP, the longer it will take to connect to the network.
- If a nearby device is using the same radio frequency signal as your camera, it may interrupt your connection.
- If your AP name is not in English, the camera may not be able to locate the device or the name may appear incorrectly.
- For network settings or a password, contact your network administrator or network service provider.
- If a WLAN requires authentication from the service provider, you may not be able to connect to it. To connect the WLAN, contact your network service provider.
- Depending on the encryption type, the number of digits in the password may differ.
- A WLAN connection may not be possible in all surroundings.
- The camera may display a WLAN enabled printer on the AP List. You cannot connect to a network via a printer.
- You cannot connect your camera to a network and a TV simultaneously. Also, you cannot view photos or videos on a TV while connected to a network.
- Connecting to a network may incur additional charges. Costs will vary based on the conditions of your contract.
- If you cannot connect to a WLAN, try another AP from the available AP list.
- You can also connect to free WLANs in some foreign countries.
- A login page may appear when you select free WLANs provided by some network service providers. Enter your ID and password to connect to the WLAN. For information about registering or the service, contact the network service providers.
- Be cautious when you enter personal information for an AP connection. Do not enter any payment or credit card information on your camera. The manufacturer is not liable for any problem caused by entering such information.
- Available network connections may differ by country.
- The WLAN feature of your camera must comply with radio transmission laws in your region. To ensure compliance, use the WLAN feature only in the country where you purchased the camera.
- The process for adjusting network settings may differ, depending on network conditions.
- Do not access a network that you are not authorized to use.
- Before you connect to a network, ensure your battery is fully charged.
- When a DHCP server is not available you must make an autoip.txt file and copy it to the inserted memory card to connect to the network using Auto IP.

## Entering text

Learn how to enter text. The icons in the table below let you move the cursor, change the case, etc. Press [**DISP**/🌷/⚡/⏲] to move to a desired key, and then press [**OK**] to enter the key.

| Icon | Description |
|---|---|
| ⬅ | Delete the last letter. |
| ◀ ▶ | Move the cursor. |
| ⬆ | In ABC mode, change the case. |
| .com | Enter ".com". |
| !@# | Switch to Symbol mode. |

| Icon | Description |
|---|---|
| ABC | Switch to ABC mode. |
| Space | Enter a space. |
| **OK** | Save the displayed text. |
| ⓘ | View the entering text guide. |

- You can use only the English alphabet, regardless of the display language.
- To move to **OK** directly, press [▶].
- You can enter up to 64 characters.

# Using photo or video sharing websites

Upload your photos or videos to file sharing websites. Available websites will be displayed on your camera.

## Accessing a website

1 Rotate the mode dial to **Wi-Fi**.

2 Select .

3 Select a website.

- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 100)

4 Enter your ID and password, and then select **Login**.

- For information about entering text, refer to "Entering text". (p. 103)
- To select an ID from the list, select ▼ → an ID.
- If you have previously logged in to the website, you may be logged in automatically.

You must have an existing account on the file sharing website to use this feature.

## Uploading photos or videos

1 Access the website with your camera.

2 Scroll to the files you want to upload, and then press [**OK**].

- You can select up to 20 files. The total size must be 10 MB or less.

3 Select **OK**.

- If you connected to the Facebook, select **OK** → **Send**.
- If you connected to the Facebook, you can enter your comments by selecting the **Comment** box. For information about entering text, refer to "Entering text". (p. 103)

- The maximum photo resolution you can upload is 2M, and the longest video you can upload is 30 seconds at **QVGA** resolution or a video recorded using 320 (WEB). If the selected photo resolution is higher than 2M, it will be automatically resized to a lower resolution.
- The method of uploading photos or videos may differ depending on the selected website.
- If you cannot access a website because of firewall or user authentication settings, contact your network administrator or network service provider.
- Uploaded photos or videos may be automatically titled with the date they were captured.
- The speed of your internet connection may affect how quickly photos upload or web pages open.
- When there are no files in the camera memory, you cannot use this feature.
- You can also upload photos or videos to file sharing websites in Playback mode by pressing [**MENU**], and then selecting **Share(Wi-Fi)** → a desired website.

# Sending photos or videos via email

You can change settings in the email menu, and send photos or videos stored on the camera via email.

## Changing email settings

In the email menu, you can change settings for storing your information. You can also set or change the email password. For information about entering text, refer to "Entering text". (p. 103)

### Storing your information

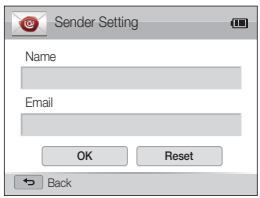
1 Rotate the mode dial to **Wi-Fi**.

2 Select .

3 Press [**MENU**].

4 Select **Sender Setting**.

5 Select the **Name** box, enter your name, and then select **OK**.




6 Select the **Email** box, enter your email address, and then select **OK**.

7 Select **OK** to save your changes.

- To delete your information, select **Reset**.

### Setting an email password

1 Rotate the mode dial to **Wi-Fi**.

2 Select .

3 Press [**MENU**].

4 Select **Setting Password** → **On**.

- To deactivate the password, select **Off**.

5 When the pop-up appears, press [**OK**].

- The pop-up disappears automatically even if you do not press [**OK**].

6 Enter a 4-digit password.

7 Enter the password again.

8 When the pop-up appears, press [**OK**].

- The pop-up disappears automatically even if you do not press [**OK**].

If you lost your password, you can reset it by selecting **Reset** on the password setting screen. When you reset the information, previously saved user's setting information, email address, and recently sent email list will be deleted.

### Changing the email password

1. Rotate the mode dial to **Wi-Fi**.
2. Select .
3. Press [**MENU**].
4. Select **Change Password**.
5. Enter your current 4-digit password.
6. Enter a new 4-digit password.
7. Enter the new password again.
8. When the pop-up appears, press [**OK**].
   - The pop-up disappears automatically even if you do not press [**OK**].

## Sending photos or videos via email

You can send photos or videos stored on the camera via email. For information about entering text, refer to "Entering text". (p. 103)

1. Rotate the mode dial to **Wi-Fi**.
2. Select .
3. Select the **Name(Email)** box, enter your email address, and then select **OK**.
   - If you have previously saved your information, it will be inserted automatically. (p. 106)
4. Select the **Receiver** box, enter an email address, and then select **OK**.
   - To use an address from the list of previous recipients, select ▼ → an address.
   - Select + to add additional recipients. You can input up to 30 recipients.
   - Select ✕ to delete an address from the list.
5. Select **OK**.

6 Scroll to files to send, and then press [**OK**].
- You can select up to 20 files. The total size must be 10 MB or less.

7 Select **OK**.

8 Select the **Comment** box, enter your comments, and then select **OK**.

9 Select **Send**.
- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device and send the email.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 100)

- Even if a photo appears to have transferred successfully, errors with the recipient's email account may cause the photo to be rejected or recognized as spam.
- You may not be able to send an email if no network connection is available or if your email account settings are incorrect.
- The maximum photo resolution you can send is 2M and the longest video you can upload is 30 seconds at **QVGA** resolution or a video recorded using 320 HQ. If the selected photo resolution is higher than 2M, it will be automatically resized to a lower resolution.
- If you cannot send an email because of firewall or user authentication settings, contact your network administrator or network service provider.
- When there are no files in the camera memory, you cannot use this feature.
- You can also send an email in Playback mode by pressing [**MENU**], and then selecting **Share(Wi-Fi)** → **Email**.

# Sending photos or videos to a smart phone

The camera connects to a smart phone that supports the MobileLink feature via a WLAN. You can easily send photos or videos to your smart phone.

- The MobileLink feature is supported by Galaxy S smart phones with the Android 2.2 OS or higher. If your smart phone uses the Android 2.1 OS, upgrade your smart phone to Android 2.2 or higher. This feature is also supported by the 7 and 10.1 inch Galaxy Tab. This feature may be supported by other devices with Android 2.2 or higher, but Samsung makes no guarantee of its functionality.
- You should install the Samsung MobileLink application on your phone or device before using this feature. You can download the application from Samsung Apps or Android market.
- When there are no files in the camera memory, you cannot use this feature.
- You can view up to 1,000 files and send up to 100 files at a time.

1 On the camera, rotate the mode dial to **Wi-Fi**.

2 On the camera, select .
- If the pop-up message that prompts you to download the application appears, select **OK**.

3 On the smart phone, turn on the Samsung MobileLink application.
- Read the on-screen instructions carefully to select and connect to your camera.
- The smart phone can connect to only one camera at a time.

4 On the camera, select **OK**.

5 On the smart phone, select files to send from the camera to the smart phone.

6 On the smart phone, select **Copy**.
- The camera will send the files.

# Using a smart phone as a remote shutter release

The camera connects to a smart phone via a WLAN. Use the smart phone as a remote shutter release with the Remote Viewfinder feature. The captured photo will display on the smart phone.

- The Remote Viewfinder feature is supported by Galaxy S smart phones with the Android 2.2 OS or higher. If your smart phone uses the Android 2.1 OS, upgrade your smart phone to Android 2.2 or higher. This feature is also supported by the 7 and 10.1 inch Galaxy Tab. This feature may be supported by other devices with Android 2.2 or higher, but Samsung makes no guarantee of its functionality.
- You should install the Remote Viewfinder application on your phone or device before using this feature. You can download the application from Samsung Apps or Android market.

1 On the camera, rotate the mode dial to **Wi-Fi**.

2 On the camera, select .
- If the pop-up message that prompts you to download the application appears, select **OK**.

3 On the smart phone, turn on the Remote Viewfinder application.
- Read the on-screen instructions carefully to select and connect to your camera.
- The smart phone can connect to only one camera at a time.

4 On the smart phone, set the following shooting options.

| Icon | Description |
|---|---|
| | Flash option |
|  | Timer option |
| | Photo size |

- While using this feature, some buttons are not available on your camera.
- The zoom button and the shutter button on your smart phone will not function when using this feature.
- Remote Viewfinder mode supports the  and  photo sizes only.

5 On the smart phone, touch and hold to focus.

- The focus is automatically set to multi-AF.

6 Release to capture the photo.

- The photo will be saved in your camera.
- Touch the photo in the bottom of the screen to save it to the smart phone. The photo will be resized to 640 X 360.

- When you use this feature, the ideal distance between the camera and the smart phone may vary, depending on your surroundings.
- The smart phone must be within 23 ft/7 m of the camera to use this feature.
- It will take some time to capture the photo after you release on the smart phone.
- The Remote Viewfinder function will deactivate when:
  - there is an incoming call on the smart phone
  - either the camera or the smart phone turn off
  - the memory is full
  - either device loses its connection to the WLAN
  - the Wi-Fi connection is poor or unstable
- To rotate the scene by rotating the smart phone, turn on the auto-rotation feature on your smart phone.

# Uploading photos to a cloud server

You can upload your photos to SkyDrive. To upload photos, you must visit the Microsoft website and register before connecting your camera.

1 Rotate the mode dial to **Wi-Fi**.

2 Select .

- If the pop-up message that prompts you to create an account appears, select **OK**.
- The camera will attempt to connect to a WLAN via the most recently connected AP.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 100)

3 Login with your ID and password.

- For information about entering text, refer to "Entering text". (p. 103)
- If you connected to SkyDrive, refer to "Using the login browser". (p. 101)

4 Scroll to the photos you want to upload, and then press [**OK**].

- You can change the uploading photo size by pressing [**MENU**], and then selecting **Upload Image Size**.

5 Select **OK**.

- You can also upload photos to a cloud server in Playback mode by pressing [**MENU**], and then selectig **Share(Wi-Fi)** → a cloud server.
- When there are no photos in the camera memory, you cannot use this feature.

# Using Auto Backup to send photos or videos

You can send photos or videos that you captured with the camera to a PC wirelessly. The Auto Backup feature works only with the Windows OS.

## Installing the program for Auto Backup on your PC

1. Install Intelli-studio on the PC. (p. 93)
2. Connect the camera to the PC with the USB cable.
3. Click **OK** on the pop-up window.
   - The Auto Backup program is installed on the PC. Follow the on-screen instructions to complete the installation.
4. Remove the USB cable.
5. Connect the camera to the PC again with the USB cable.
   - The camera stores information about the PC, so that the camera can send files to the PC.

Before installing the program, ensure that the PC is connected to a network. If no internet connection is available, you must install the program from the provided CD.

## Sending photos or videos to a PC

1. Rotate the mode dial to **Wi-Fi**.
2. Select .
   - If the guide message appears, press [**OK**].
3. Press [**MENU**] to set options.
   - To turn off your PC automatically after the transfer is complete, select **Shut down PC after backup** → **On**.
4. Press [**OK**] to start the backup.
   - To cancel sending, press [**OK**].
   - You cannot select individual files to backup. This function backs up only new files on the camera.
   - The backup's progress will be shown on the PC monitor.
   - When the transfer is completed, the camera will turn off automatically in approximately 30 seconds. Select **Cancel** to return to the previous screen and prevent the camera from turning off automatically.

- If the PC supports the Wake on LAN (WOL) feature, you can turn on the PC automatically by searching for the PC from your camera. (p. 118)
- When you connect the camera to the WLAN, select the AP that is connected to the PC.
- The camera will search for available access points even if you are connecting to the same access point again.
- If you turn off the camera or remove the battery while sending files, the file transfer will be interrupted.
- While you are using this feature, only [**POWER**] is available on your camera.
- You can connect only one camera to the PC at a time for sending files.
- The backup may be canceled due to network conditions.
- Photos or videos can be sent to a PC one time only. Files cannot be sent again even if you reconnect your camera to another PC.
- When there are no files in the camera memory, you cannot use this feature.
- You must turn off Windows Firewall and any other firewalls before using this feature.
- You can send up to 1,000 files.
- On the PC software, the server name must be entered in the Latin alphabet and can contain no more than 48 characters.

# Viewing photos or videos on a TV Link-enabled TV

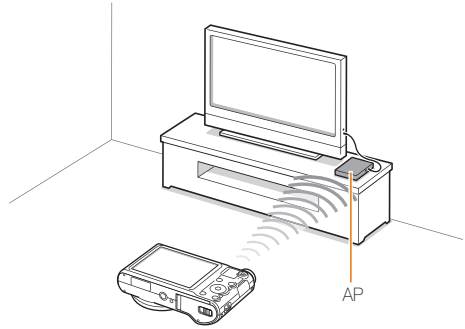
TV Link is a technology for sharing media files between a camera and TV connected to the same AP device. With this technology, you can view your photos or videos on a widescreen TV.

1 Rotate the mode dial to **Wi-Fi**.

2 Select .
- If the guide message appears, press [**OK**].
- The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
- If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 100)

3 Connect your TV to a wireless network via an AP device.
- Refer to your TV's user manual for more information.

4 On the TV, search for the camera and browse the shared photos or videos.
- For information about searching for the camera and browsing the photos or videos on the TV, refer to the TV user manual.
- Videos may not play smoothly depending on the type of TV or network condition. If this happens, re-record the video in **VGA** or **QVGA** quality and play it again. If videos do not play smoothly on your TV over the wireless connection, try connecting the camera to the TV with an A/V cable.



- You can share up to 1,000 photos or videos.
- On a TV screen, you can view only photos or videos captured with your camera.
- The range of the wireless connection between your camera and a TV may vary depending on the specifications of the AP.
- If the camera is connected to 2 TVs, playback may be slower.
- Photos or videos will be shared in their original sizes.
- You can use this feature only with TV Link-enabled TVs.
- Shared photos or videos will not be stored on the TV, but they can be stored in the camera to meet the TV's specifications.
- Transferring photos or videos to the TV may take some time depending on the network connection, the number of files to be shared, or sizes of the files.
- If you power off the camera abnormally while viewing photos or videos on a TV (for example, by removing the battery), the TV considers the camera to still be connected.
- The order of photos or videos on the camera may be different than on the TV.
- Depending on the number of photos or videos you want to share, it may take some time to load your photos or videos and complete the initial set-up process.
- While viewing photos or videos on the TV, continuously using the TV remote or performing additional operations on the TV may prevent this feature from working properly.
- If you reorder or sort files on the camera while viewing them on a TV, you must repeat the initial set-up process to update the list of files on the TV.
- When there are no files in the camera memory, you cannot use this feature.

# Sending photos using Wi-Fi Direct

When the camera connects via a WLAN to a device that supports the Wi-Fi Direct function, you can send photos to the device. This feature may not be supported on some devices.

1. On the device, turn on the Wi-Fi Direct option.
2. On the camera, in Playback mode, scroll to a photo.
3. Press [**MENU**], and then select **Share(Wi-Fi)** → **Wi-Fi Direct**.
   - When in the single image view, you can send only one photo at a time.
   - When in thumbnails view, you can select multiple photos by scrolling to thumbnails, and then pressing [**OK**]. Select **OK** when you are finished selecting photos.
4. Select the device from the camera's list of Wi-Fi Direct devices.
   - Ensure that the device's Wi-Fi Direct option is turned on.
   - You can also select your camera from the device's list of Wi-Fi Direct devices.
5. On the device, allow the camera to connect to the device.
   - The photo will be sent to the device.

- When there are no photos in the camera memory, you cannot use this feature.
- If you cancel the connection attempt before it is complete, the camera may not be able to reconnect to the device. In this case, update your device with the latest firmware.

# About the Wake on LAN (WOL) feature

With the WOL feature, you can automatically turn on or wake up a PC with your camera. This feature has been available for Samsung desktop PCs for the last 5 years (not available for all-in-one PCs).

Any changes to your PC's BIOS settings other than the ones described below may damage your PC. The manufacturer is not responsible for damage caused by your changing your PC's BIOS settings.

## Setting the PC to wake up from sleep mode

1. Click **Start**, and then open the **Control Panel**.
2. Configure the network connection.
   - Windows 7:
     Click **Network and Internet** → **Network and Sharing Center** → **Change adapter settings**.
   - Windows Vista:
     Click **Network and Internet** → **Network and Sharing Center** → **Manage network connections**.
   - Windows XP:
     Click **Network and Internet Connection** → **Network Connection**.
3. Right click **Local Area**, and then click **Properties**.
4. Click **Configure** → the **Power manage** tab → **Allow this device to wake the computer**.
5. Click **OK**.
6. Restart the PC.

## Setting the PC to turn on

1. Turn on the PC, and then press F2 while the PC is booting.
   - The BIOS setting menu will appear.
2. Select **Advanced** tab → **Power management Setup**.
3. Select **Resume on PME** → **Enabled**.
4. Press F10 to save your changes, and then continue booting.
5. Click **Start**, and then open the **Control Panel**.
6. Configure the network connection.
   - Windows 7:
     Click **Network and Internet** → **Network and Sharing Center** → **Change adapter settings**.
   - Windows Vista:
     Click **Network and Internet** → **Network and Sharing Center** → **Manage network connections**.
   - Windows XP:
     Click **Network and Internet Connection** → **Network Connection**.
7. Select the drivers for the network adapter.
8. Click the **Advanced** tab, and then set the WOL menus.

- You cannot use this feature across a firewall or if a security program has been installed.
- To turn on the PC with the WOL feature, the PC must have an active connection to the LAN. Ensure that the indicator light on the PC's LAN port is on indicating that the LAN connection is active.
- Depending on your PC model, the camera may only be able to wake the PC.
- Depending on your PC's OS or drivers, the names of the WOL setting menu may vary.
  - examples of setting menu names: Enable PME, Wake on LAN, etc.
  - examples of setting menu values: Enable, Magic packet, etc.

# Settings

Refer to options to configure your camera's settings.


Settings menu ..... 121
- Accessing the settings menu ..... 121
- Sound ..... 122
- Display ..... 122
- Connectivity ..... 123
- General ..... 124

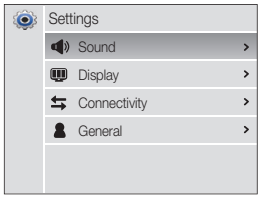
# Settings menu

Learn to configure your camera's settings.

## Accessing the settings menu

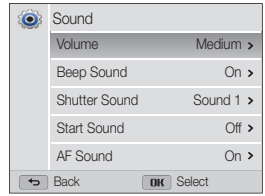
1 Rotate the mode dial to ⚙.

2 Select a menu.

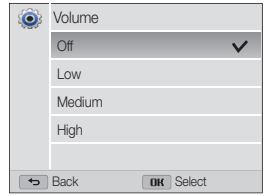



| Option | Description |
|---|---|
| | **Sound**: Set various camera sounds and the volume. (p. 122) |
| | **Display**: Customize the display settings. (p. 122) |
| | **Connectivity**: Set the connection options. (p. 123) |
| | **General**: Change the settings for the camera system such as memory format and default file name. (p. 124) |

3 Select an item.




4 Select an option.




5 Press [⮌] to return to the previous screen.

## Sound

* Default

| Item | Description |
|---|---|
| Volume | Set the volume of all sounds. (**Off**, **Low**, **Medium***, **High**) |
| Beep Sound | Set to emit a sound when you press the buttons or switch modes. (**Off**, **On***) |
| Shutter Sound | Set the sound the camera emits when you press the shutter button. (**Off**, **Sound 1***, **Sound 2**, **Sound 3**) |
| Start Sound | Set the sound the camera emits when you turn on your camera. (**Off***, **Star Flight**, **Laser Show**, **Cloud**) |
| AF Sound | Set to emit a sound when you half-press the shutter button. (**Off**, **On***) |

## Display

* Default

| Item | Description |
|---|---|
| Start Image | Set a start image to display when the camera turns on.<br>• **Off***: Display no start image.<br>• **Logo**: Display a default image stored in the internal memory.<br>• **User Image**: Select User Image from the photos you captured in the memory.<br>• The camera will save only one User Image in the internal memory at a time.<br>• If you select a new photo as a User Image or reset your camera, the camera will delete the current image. |
| Guide Line | Select a guide to help you compose a scene. (**Off***, **3 X 3**, **2 X 2**, **Cross**, **Diagonal**) |
| Date/Time Display | Set whether or not to display the date and time on the camera's display. (**Off***, **On**) |
| Help Display | Display a brief description of an option or menu. (**Off**, **On***) |

* Default

| Item | Description |
|---|---|
| Display Brightness | Adjust the brightness of the screen. (**Auto***, **Dark**, **Normal**, **Bright**)<br>**Normal** is fixed in Playback mode even if you have selected **Auto**. |
| Quick View | Set whether or not to review a captured image before returning to the Shooting mode. (**Off**, **On***) |
| Power Save | If you perform no operations for 30 seconds, the camera automatically switches to Power save mode. (**Off***, **On**)<br>• In Power save mode, press any button other than [**POWER**] to resume using the camera.<br>• Even if you do not set the Power save mode, the screen will dim 30 seconds after the last operation to save power. |

## Connectivity

* Default

| Item | Description |
|---|---|
| Video Out | Set the video signal output for your region.<br>• **NTSC**: USA, Canada, Japan, Korea, Taiwan, Mexico<br>• **PAL** (supports only BDGHI): Australia, Austria, Belgium, China, Denmark, England, Finland, France, Germany, Italy, Kuwait, Malaysia, Netherlands, New Zealand, Norway, Singapore, Spain, Sweden, Switzerland, Thailand |
| USB | Select the mode to use when you connect the camera to a computer or printer with a USB cable.<br>• **Computer***: Connect your camera to a computer for transferring files.<br>• **Printer**: Connect your camera to a printer for printing files.<br>• **Select Mode**: Manually select the USB mode when you connect your camera to a device. |
| PC Software | Set Intelli-studio to launch automatically when you connect your camera to your computer. (**Off**, **On***) |

## General

* Default

| Item | Description |
|---|---|
| Device Information (WB150F/WB151F/ WB152F only) | See the Mac address and serial number of your camera. |
| Language | Set a language for the display text. |
| Time Zone | Set the time zone for your location. When you travel to another country, select **Visit**, and then select the appropriate time zone. (**Home***, **Visit**) |
| Date/Time Set | Set the date and time. |
| Date Type | Set a date format. (**YYYY/MM/DD**, **MM/DD/YYYY**, **DD/MM/YYYY**)<br>The default date type may differ depending on the language selected. |

* Default

| Item | Description |
|---|---|
| File No. | Specify how to name files.<br>• **Reset**: Set the file number to start from 0001 when you insert a new memory card, format a memory card, or delete all files.<br>• **Series***: Set the file number to resume from the previous file number when you insert a new memory card, format a memory card, or delete all files.<br>• The default name of the first folder is 100PHOTO and the default name of the first file is SAM_0001.<br>• The file number increases by one, from SAM_0001 to SAM_9999, each time you take a picture.<br>• The folder number increases by one, from 100PHOTO to 999PHOTO, each time a folder is full.<br>• The maximum number of files that can be stored in one folder is 9,999.<br>• The camera defines file names according to the Design rule for Camera File system (DCF) standard. If you intentionally change file names, the camera may not play back the files. |

* Default

| Item | Description |
|---|---|
| Imprint | Set whether or not to display the date and time on captured photos. (**Off***, **Date**, **Date & Time**)<br>• The date and time will be displayed on the bottom right corner of the photo.<br>• Some printer models may not print the date and time properly.<br>• The photo will not display the date and time if:<br>- you select **Text** in **SCN** mode<br>- you select **Live Panorama** in mode (WB150F/WB151F/WB152F only)<br>- you select mode (WB150/WB151 only)<br>- you select **Picture in Picture** in mode |
| Auto Power Off | Set the camera to automatically turn off when you perform no operations for a specified period. (**Off**, **1 min**, **3 min***, **5 min**, **10 min**)<br>• Your settings will not change when you replace the battery.<br>• The camera will not automatically turn off when the camera is connected to a computer, printer, or WLAN, and when you are playing a slide show or videos. |

* Default

| Item | Description |
|---|---|
| AF Lamp | Set a light to automatically turn on in dark places to help you focus. (**Off**, **On***) |
| Format | Format the internal memory and the memory card. Formatting will delete all files, including protected files. (**Yes**, **No**)<br>Errors can occur if you use a memory card formatted by another brand of camera, a memory card reader, or a computer. Please format memory cards in the camera before using them to capture photos. |
| Reset | Reset menus and shooting options. Date and time, language, and video output settings will not be reset. (**Yes**, **No**) |

# Appendixes

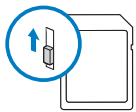
Get information about error messages, specifications, and maintenance.


Error messages ..... 127
Camera maintenance ..... 129
- Cleaning your camera ..... 129
- Using or storing the camera ..... 130
- About memory cards ..... 131
- About the battery ..... 134

Before contacting a service center ..... 138
Camera specifications ..... 141
Glossary ..... 145
FCC notice ..... 150
Declaration sentence in official languages ..... 153
Index ..... 155

# Error messages

When the following error messages appear, try these remedies.

| Error message | Suggested remedies |
|---|---|
| Card Error | • Turn off your camera, and then turn it on again.<br>• Remove your memory card, and then insert it again.<br>• Format your memory card. |
| Card Locked | You can lock an SD, SDHC, or SDXC card to prevent files from being deleted. Unlock the card when shooting.<br>  |
| Card not supported. | The inserted memory card is not supported by your camera. Insert a SD, SDHC, or SDXC memory card. |
| Connection failed. | • The camera cannot connect to the network using the selected access point. Select another AP and try again.<br>• The camera has failed to connect to the other camera. Try connecting again. |

| Error message | Suggested remedies |
|---|---|
| DCF Full Error | File names do not match the DCF standard. Transfer the files from the memory card to your computer and format the card. Then, open the Settings menu and select **File No.** → **Reset**. (p. 124) |
| Device disconnected. | Network connection disconnected while transferring photos. Select a TV Link device again. |
| File Error | Delete the damaged file or contact a service center. |
| File system not supported. | Your camera does not support the FAT file structure of the inserted memory card. Format the memory card on the camera. |
| Initialization failed. | • Turn on TV Link enabled devices on the network.<br>• The camera has failed to locate a TV Link-enabled device. |
| Invalid password. | The password for transferring files to another camera is wrong. Enter the correct password again. |
| Low Battery | Insert a charged battery or recharge the battery. |

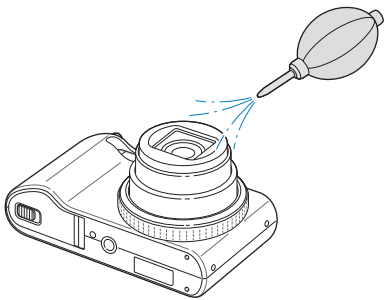
| Error message | Suggested remedies |
|---|---|
| Memory Full | Delete unnecessary files or insert a new memory card. |
| No Image File | Capture photos or insert a memory card that contains some photos. |
| Photo transfer failed. | Network connection disconnected while transferring photos. Try turning on the TV Link feature again. |
| Photo reception failed. | The camera has failed to receive a photo from the sending camera. Ask the other person to send the file again. |
| Transfer failed. | • The camera has failed to send a photo to the other camera. Try sending again.<br>• The camera has failed to send an email or transfer a photo to a TV Link device. Check the network connection and try again. |

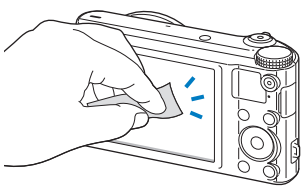
# Camera maintenance

## Cleaning your camera

### Camera lens and display

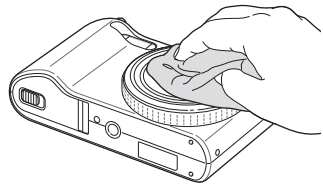
Use a blower brush to remove dust and wipe the lens gently with a soft cloth. If any dust remains, apply lens cleaning liquid to a piece of lens cleaning paper and wipe gently.





### Camera body

Wipe gently with a soft, dry cloth.



- Never use benzene, thinners, or alcohol to clean the device. These solutions can damage the camera or cause it to malfunction.
- Do not press on the lens cover or use a blower brush on the lens cover.

## Using or storing the camera

### Inappropriate places to use or store the camera

- Avoid exposing the camera to very cold or very hot temperatures.
- Avoid using your camera in areas with extremely high humidity, or where the humidity changes drastically.
- Avoid exposing the camera to direct sunlight and storing it in hot, poorly-ventilated areas, such as in a car during summer time.
- Protect your camera and the display from impact, rough handling, and excessive vibration to avoid serious damage.
- Avoid using or storing your camera in dusty, dirty, humid, or poorly-ventilated areas to prevent damage to moving parts and internal components.
- Do not use your camera near fuels, combustibles, or flammable chemicals. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the camera or its accessories.
- Do not store the camera where there are mothballs.

### Using on beaches or shores

- Protect your camera from sand and dirt when you use it on beaches or in similar areas.
- Your camera is not waterproof. Do not handle the battery, adapter, or memory card with wet hands. Operating the camera with wet hands may cause damage to your camera.

### Storing for extended period of time

- When you store the camera for an extended period, place it in a sealed container with an absorbent material, such as silica gel.
- Remove the batteries from your camera when storing it for an extended period. Installed batteries may leak or corrode over time and cause serious damage to your camera.
- Over time, unused batteries will discharge and must be recharged before use.
- The present date and time can be initialized when the camera is turned on after the camera and battery have been separated for over 40 hours.

### Using the camera with caution in humid environments

When you transfer the camera from a cold environment to a warm one, condensation can form on the lens or internal components of the camera. In this situation, turn off the camera and wait for at least 1 hour. If condensation forms on the memory card, remove the memory card from the camera and wait until all moisture has evaporated before reinserting it.

### Other cautions

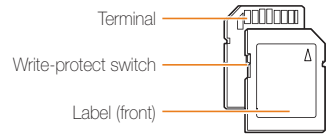
- Do not swing your camera by the strap. This may cause injury to yourself or others or damage to your camera.
- Do not paint your camera, as paint can clog moving parts and prevent proper operation.
- Turn off the camera when not using it.

- Your camera contains delicate parts. Avoid impacts to the camera.
- Protect the display from external force by keeping it in the case when not in use. Protect the camera from scratches by keeping it away from sand, sharp implements, or loose change.
- Do not use the camera if the screen is cracked or broken. Broken glass or acrylic could cause injury to your hands and face. Take the camera to a Samsung service center to have it repaired.
- Never place cameras, batteries, chargers, or accessories near, on, or in heating devices, such as microwave ovens, stoves, or radiators. These devices may be deformed and can overheat and cause a fire or explosion.
- Do not expose the lens to direct sunlight, as this may discolor the image sensor or cause it to malfunction.
- Protect the lens from fingerprints and scratches. Clean the lens with a soft, clean, debris-free lens cloth.
- The camera may turn off if struck or dropped. This is to protect the memory card. Turn on the camera to use it again.
- While you use the camera, it may heat up. This is normal and should not affect your camera's lifespan or performance.
- When you use the camera in low temperatures, it may take some time to turn on, the color of the display may be changed temporarily, or after-images may appear. These conditions are not malfunctions and they will correct themselves when the camera is returned to milder temperatures.
- Paint or metal on the outside of the camera may cause allergies, itchy skin, eczema, or swelling for people with sensitive skin. If you experience any of these symptoms, stop using the camera immediately and consult a doctor.
- Do not insert foreign objects into any of your camera's compartments, slots, or access points. Damage due to improper use may not be covered by your warranty.
- Do not allow unqualified personnel to service the camera or attempt to service the camera yourself. Any damage that results from unqualified service is not covered by your warranty.

## About memory cards

### Supported memory cards

Your camera supports SD, SDHC, or SDXC memory cards.




You can prevent files from being deleted by using the write-protect switch on an SD, SDHC, or SDXC card. Slide the switch down to lock or slide it up to unlock. Unlock the card when capturing photos and videos.

## Memory card capacity

The memory capacity may differ depending on shooting scenes or shooting conditions. These capacities are based on a 1 GB SD card:

### Photo

| Size | Super Fine | Fine | Normal |
|---|---|---|---|
| 14M | 144 | 259 | 381 |
| 12M | 162 | 287 | 423 |
| 10M | 190 | 343 | 498 |
| 10M | 201 | 353 | 519 |
| 8M | 246 | 435 | 630 |
| 5M | 386 | 686 | 950 |
| 3M | 624 | 1,065 | 1,404 |
| 2M | 846 | 1,373 | 1,993 |
| 1M | 1,817 | 2,809 | 3,433 |

### Video

| Size | 30fps | 15fps |
|---|---|---|
| HD<br>1280 X 720 | Approx.<br>15' 20" | Approx.<br>29' 42" |
| VGA<br>640 X 480 | Approx.<br>35' 54" | Approx.<br>67' 30" |
| QVGA<br>320 X 240 | Approx.<br>138' 19" | Approx.<br>237' 41" |
| 320 WEB<br>For Sharing<br>(WB150F/WB151F/ WB152F only) | Approx.<br>138' 19" | Approx.<br>237' 41" |

* The figures above are measured without using the zoom function. Available recording time may vary if you use the zoom. Several videos were recorded in succession to determine the total recording time.

## Cautions when using memory cards

- Avoid exposing memory cards to very cold or very hot temperatures (below 0 °C/32 °F or above 40 °C/104 °F). Extreme temperatures can cause memory cards to malfunction.
- Insert a memory card in the correct direction. Inserting a memory card in the wrong direction may damage your camera and memory card.
- Do not use memory cards that have been formatted by other cameras or by a computer. Reformat the memory card with your camera.
- Turn off the camera before you insert or remove the memory card.
- Do not remove the memory card or turn off your camera while the lamp is blinking, as this may damage your data.
- When the lifespan of a memory card has expired, you cannot store any more photos on the card. Use a new memory card.
- Do not bend, drop, or subject memory cards to heavy impact or pressure.
- Avoid using or storing memory cards near strong magnetic fields.
- Avoid using or keeping memory cards in areas with high temperature, high humidity, or corrosive substances.
- Prevent memory cards from making contact with liquids, dirt, or foreign substances. If dirty, wipe the memory card clean with a soft cloth before you insert the memory card into your camera.
- Do not allow liquids, dirt, or foreign substances to come in contact with memory cards or the memory card slot. Doing so may cause memory cards or the camera to malfunction.
- When you carry a memory card, use a case to protect the card from electrostatic discharges.
- Transfer important data to other media, such as a hard disk, CD, or DVD.
- When you use the camera for an extended period, the memory card may become warm. This is normal and does not indicate a malfunction.

The manufacturer is not responsible for any loss of data.

## About the battery

Use only Samsung-approved batteries.

### Battery specifications

| Specification | Description |
|---|---|
| Model | SLB-10A |
| Type | Lithium-ion battery |
| Cell capacity | 1,030 mAh |
| Voltage | 3.7 V |
| Charging time* (when the camera is switched off) | Approximately 240 min |

* Charging the battery by connecting it to a computer may take longer.

### Battery life

| Average shooting time/ Number of photos | | Test conditions (when the battery is fully charged) |
|---|---|---|
| Photos | Approximately 150 min/ Approximately 300 photos | The battery life was measured under the following conditions: in **P** mode, in darkness, 14M resolution, Fine quality, OIS on.<br>1. Set the flash option to **Fill in**, take a single shot, and zoom in or out.<br>2. Set the flash option to **Off**, take a single shot, and zoom in or out.<br>3. Perform steps 1 and 2, waiting 30 seconds between each step. Repeat the process for 5 minutes, and then turn off the camera for 1 minute.<br>4. Repeat steps 1 to 3. |
| Videos | Approximately 120 min | Record videos at **HD** resolution and 30 FPS. |

- The figures above are measured by Samsung's standards. Your results may differ, depending on your actual usage.
- Several videos were recorded in succession to determine the total recording time.
- When using network functions, the battery will be depleted more quickly.

## Low battery message

When the battery has fully discharged, the battery icon will turn red and the "**Low Battery**" message will appear.

## Notes about using the battery

- Avoid exposing batteries to very cold or very hot temperatures (below 0 °C/32 °F or above 40 °C/104 °F). Extreme temperatures can reduce the charging capacity of your batteries.
- When you use the camera for an extended period, the area around the battery chamber may become warm. This does not affect the normal use of the camera.
- Do not pull the power supply cord to disconnect the plug from the power outlet, as this may cause a fire or electric shock.
- In temperatures below 0 °C/32 °F, battery capacity and battery life may decrease.
- Battery capacity may decrease in low temperatures but will return to normal in milder temperatures.

## Cautions about using the battery

**Protect batteries, chargers, and memory cards from damage**

Prevent batteries from making contact with metal objects, as this can create a connection between the + and – terminals of your battery and lead to temporary or permanent battery damage and may cause a fire or electric shock.

## Notes about charging the battery

- If the status lamp is off, make sure that the battery is inserted correctly.
- If the camera is on while charging, the battery may not fully charge. Turn off the camera before charging the battery.
- Do not use your camera when you are charging the battery. This may cause a fire or electric shock.
- Do not pull the power supply cord to disconnect the plug from the power outlet, as this may cause a fire or electric shock.
- Let the battery charge for at least 10 minutes before turning on the camera.
- If you connect the camera to an external power source when the battery is depleted, using high energy-consuming functions will cause the camera to turn off. To use the camera normally, recharge the battery.

- If you reconnect the power cable when the battery is fully charged, the status lamp turns on for approximately 30 minutes.
- Using the flash or recording videos depletes the battery quickly. Charge the battery until the red status lamp turns off.
- If the status lamp blinks in red, reconnect the cable, or remove the battery and insert it again.
- If you charge the battery when the cable is overheated or the temperature is too high, the status lamp may blink in red. Charging will start when the battery cools down.
- Overcharging batteries may shorten battery life. After charging is finished, disconnect the cable from your camera.
- Do not bend or place heavy objects on the AC cable. Doing so may damage the cable.

### Notes about charging with a computer connected

- Use only the provided USB cable.
- The battery may not charge when:
  - you use a USB hub
  - other USB devices are connected to your computer
  - you connect the cable to the port on the front side of your computer
  - the USB port of your computer does not support the power output standard (5 V, 500 mA)

### Handling and disposing of batteries and chargers with care

- Never dispose of batteries in a fire. Follow all local regulations when you dispose of used batteries.
- Never place batteries or cameras on or in heating devices, such as microwave ovens, stoves, or radiators. Batteries may explode when they are overheated.

**Personal injury or death can occur if the battery is handled carelessly or improperly. For your safety, follow these instructions for proper battery handling:**

- The battery can ignite or explode if not handled properly. If you notice any deformities, cracks, or other abnormalities in the battery, immediately discontinue use of the battery and contact a service center.
- Use only authentic, manufacturer-recommend battery chargers and adapters and charge the battery only by the methods described in this user manual.
- Do not place the battery near heating devices or expose it to excessively warm environments, such as the inside of an enclosed car in the summertime.
- Do not place the battery in a microwave oven.
- Avoid storing or using the battery in hot, humid places, such as spas or shower enclosures.
- Do not rest the camera on flammable surfaces, such as bedding, carpets, or electric blankets for a prolonged period.
- When the camera is switched on, do not leave it in any confined space for a prolonged period.
- Do not allow battery terminals to come in contact with metallic objects, such as necklaces, coins, keys, or watches.
- Use only authentic, manufacturer-recommended, Lithium-ion replacement batteries.
- Do not disassemble or puncture the battery with any sharp object.
- Avoid exposing the battery to high pressure or crushing forces.
- Avoid exposing the battery to major impacts, such as dropping it from high places.
- Do not expose the battery to temperatures of 60 °C (140 °F) or above.
- Do not allow the battery to come in contact with moisture or liquids.
- Do not expose the battery to sources of excessive heat such as sunshine, fire or the like.

### Disposal guidelines

- Dispose of the battery with care.
- Do not dispose of the battery in a fire.
- Disposal regulations may differ by country or region. Dispose of the battery in accordance with all local and federal regulations.

### Guidelines for charging the battery

Charge the battery only by the method described in this user manual. The battery can ignite or explode if not charged properly.

# Before contacting a service center

If you are having trouble with your camera, try these troubleshooting procedures before you contact a service center. If you have attempted the suggested remedy and are still having problems with your device, contact your local dealer or service center.

When you leave your camera at a service center, be sure to also leave the other components that may have contributed to the malfunction, such as the memory card and battery.

| Situation | Suggested remedies |
|---|---|
| Cannot turn on the camera | • Ensure that the battery is inserted.<br>• Ensure that the battery is inserted correctly. (p. 19)<br>• Charge the battery. |
| The power turns off suddenly | • Charge the battery.<br>• Your camera may be in Auto Power Off mode. (p. 125)<br>• The camera may turn off to prevent the memory card from being damaged due to an impact. Turn on your camera again. |
| The camera is losing battery power quickly | • The battery may lose power more quickly in low temperatures (below 0 °C/32 °F). Keep the battery warm by putting it into your pocket.<br>• Using the flash or recording videos depletes the battery quickly. Recharge if needed.<br>• Batteries are consumable parts that must be replaced over time. Get a new battery if the battery life is diminishing quickly. |

| Situation | Suggested remedies |
|---|---|
| Cannot capture photos | • There is no space on the memory card. Delete unnecessary files or insert a new card.<br>• Format the memory card.<br>• The memory card is defective. Get a new memory card.<br>• Make sure that the camera is switched on.<br>• Charge the battery.<br>• Make sure that the battery is inserted correctly. |
| The camera freezes | Remove the battery and insert it again. |
| The camera heats up | While you use the camera, it may heat up. This is normal and should not affect your camera's lifespan or performance. |
| The flash does not work | • The flash option may be set to **Off**. (p. 57)<br>• You cannot use the flash in some modes. |

| Situation | Suggested remedies |
|---|---|
| The flash fires unexpectedly | The flash may fire due to static electricity. The camera is not malfunctioning. |
| The date and time are incorrect | Set the date and time in the display settings. (p. 124) |
| The display or buttons do not work | Remove the battery, and then insert it again. |
| The camera display responds poorly | If you use your camera at very low temperatures, it may cause the camera screen to malfunction or discolor. For better performance of your camera screen, use your camera in moderate temperatures. |
| The memory card has an error | • Turn off your camera, and then turn it on again.<br>• Remove your memory card, and then insert it again.<br>• Format your memory card.<br>See “Cautions when using memory cards” for more detail. (p. 133) |
| Cannot play back files | If you change the name of a file, your camera may not play the file (the name of the file should meet the DCF standard). If you encounter this situation, play back the files on your computer. |

| Situation | Suggested remedies |
|---|---|
| The photo is blurry | • Make sure that the focus option you set is suitable for close-up shots. (p. 60)<br>• Make sure that the lens is clean. If not, clean the lens. (p. 129)<br>• Make sure that the subject is within range of the flash. (p. 142) |
| The colors in the photo do not match the actual scene | An incorrect White Balance can create unrealistic color. Select the proper White Balance option to suit the light source. (p. 71) |
| The photo is too bright | Your photo is overexposed.<br>• Turn off the flash. (p. 57)<br>• Adjust the ISO sensitivity. (p. 59)<br>• Adjust the exposure value. (p. 69) |
| The photo is too dark | Your photo is underexposed.<br>• Turn on the flash. (p. 57)<br>• Adjust the ISO sensitivity. (p. 59)<br>• Adjust the exposure value. (p. 69) |

| Situation | Suggested remedies |
|---|---|
| The TV does not display your photos | • Make sure that the camera is correctly connected to the TV with the A/V cable.<br>• Make sure that your memory card contains photos. |
| Your computer does not recognize your camera | • Make sure that the USB cable is connected correctly.<br>• Make sure that your camera is switched on.<br>• Make sure that you are using a supported operating system. |
| Your computer disconnects the camera while transferring files | The file transmission may be interrupted by static electricity. Disconnect the USB cable and connect it again. |
| Your computer cannot play videos | Videos may not play on some video player programs. To play video files captured with your camera, install and use the Intelli-studio program on your computer. (p. 93) |
| Intelli-studio is not functioning properly | • End Intelli-studio and restart the program.<br>• You cannot use Intelli-studio on Macintosh computers.<br>• Make sure that **PC Software** is set to **On** in the settings menu. (p. 123)<br>• Depending on your computer's specifications and environment, the program may not launch automatically. In this case, click **Start** → **All Programs** → **SAMSUNG** → **Intelli-studio** → **Intelli-studio** on your computer. |
| Your TV or computer cannot display photos and videos that are stored on an SDXC memory card. | SDXC memory cards use the exFAT file system. Ensure that the external device is compatible with the exFAT file system before connecting the camera to the device. |
| Your computer does not recognize an SDXC memory card. | SDXC memory cards use the exFAT file system. To use SDXC memory cards on a Windows XP computer, download and update the exFAT file system driver from the Microsoft website. |

# Camera specifications

| Image sensor | |
|---|---|
| Type | 1/2.3" (Approximately 7.76 mm) CCD |
| Effective pixels | Approximately 14.2 mega-pixels |
| Total pixels | Approximately 16.4 mega-pixels |
| **Lens** | |
| Focal length | Schneider-KREUZNACH Lens f = 4.0–72.0 mm (35 mm film equivalent: 24–432 mm) |
| F-stop range | F3.2 (W)–F5.8 (T) |
| Zoom | • Still image mode: 1.0–18.0X (Optical zoom X Digital zoom: 90.0X, Optical zoom X Intelli zoom: 36.0X)<br>• Playback mode: 1.0–14.4X (depending on image size) |
| **Display** | |
| Type | TFT LCD |
| Feature | 3.0" (7.62 cm) 460K |
| **Focusing** | |
| Type | TTL auto focus (Center AF, Multi AF, Selection AF, Tracking AF, Face Detection AF, Smart Face Recognition AF), Manual Focus |

| Range | | Wide (W) | Tele (T) |
|---|---|---|---|
| | Normal (AF) | 80 cm-infinity | 350 cm-infinity |
| | Macro | 5-80 cm | 180-350 cm |
| | Auto Macro | 5 cm-infinity | 180 cm-infinity |
| | Manual Focus | 5 cm-infinity | 180 cm-infinity |

| Shutter speed |
|---|
| • Auto: 1/8-1/2,000 sec.<br>• Program: 1-1/2,000 sec.<br>• Manual: 16-1/2,000 sec.<br>• Night: 8-1/2,000 sec. |

| Exposure | |
|---|---|
| Control | Program AE, Aperture Priority AE, Shutter Priority AE, Manual Exposure |
| Metering | Multi, Spot, Center-weighted, Face Detection |
| Compensation | ±2EV (1/3 EV Step) |
| ISO equivalent | Auto, ISO 80, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200 |

| Flash | |
|---|---|
| Mode | Auto, Red-eye, Fill in, Slow Sync, Off, Red-eye Fix |
| Range | • Wide: 0.3–3.5 m (ISO Auto)<br>• Tele: 0.5–1.9 m (ISO Auto) |
| Recharging time | Approximately 4 sec. |

| Shake reduction |
|---|
| Optical Image Stabilization (OIS) |

| Effect | |
|---|---|
| Photo Shooting mode | • Photo Filter (Smart Filter): Miniature, Vignetting, Ink Painting, Oil Painting, Cartoon, Cross Filter, Sketch, Soft Focus, Fish-eye, Old Film, Half Tone Dot, Classic, Retro, Zooming Shot<br>• Image Adjust: Sharpness, Contrast, Saturation |
| Video Shooting mode | Movie Filter (Smart Filter): Miniature, Vignetting, Half Tone Dot, Sketch, Fish-eye, Classic, Retro, Palette Effect 1, Palette Effect 2, Palette Effect 3, Palette Effect 4 |

| White Balance |
|---|
| Auto WB, Daylight, Cloudy, Fluorescent_H, Fluorescent_L, Tungsten, Custom Set, Color Temp. |

| Date Imprinting |
|---|
| Date & Time, Date, Off |

| Shooting | |
|---|---|
| Photos | • Modes: Smart Auto (Portrait, Night Portrait, Backlight Portrait, Night, Backlight, Landscape, White, Natural Green, Blue Sky, Sunset, Macro, Macro text, Macro Color, Tripod, Action, Fireworks), Program, Aperture Priority, Shutter Priority, Manual, Scene (Beauty Shot, Night, Landscape, Text, Sunset, Dawn, Backlight, Beach & Snow), Magic Plus (Live Panorama, Magic Frame, Split Shot, Picture in Picture, Artistic Brush, Photo Filter)<br>• Burst: Single, Continuous, Motion Capture, AEB<br>• Timer: Off, 10 Sec, 2 Sec, Double (10 Sec, 2 Sec) |
| Videos | • Modes: Smart Scene Detection (Landscape, Blue Sky, Natural Green, Sunset), Movie, Magic Plus (Picture in Picture, Movie Filter)<br>• Format: MP4 (H.264) (Max recording time: 20 min)<br>• Size: 1280 X 720, 640 X 480, 320 X 240, For Sharing (WB150F/WB151F/WB152F only)<br>• Frame Rate: 30fps, 15fps<br>• Sound Alive: Sound Alive On, Sound Alive Off, Mute<br>• OIS: On, Off<br>• Video editing (embedded): Pause during recording |

| Playback | |
|---|---|
| Photos | • Type: Single image, Thumbnails, Multi Slide Show with Music and Effect, Movie clip, Smart Album*<br>* Smart Album category: All, Date, Face List, File Type<br>• Edit: Resize, Rotate, Image Adjust, Smart Filter, Crop<br>• Effect: Image Adjust (Brightness, Contrast, Saturation, ACB, Face Retouch, Red-eye Fix), Smart Filter (Normal, Miniature, Vignetting, Ink Painting, Oil Painting, Cartoon, Cross Filter, Sketch, Soft Focus, Fish-eye, Old Film, Half Tone Dot, Classic, Retro, Zooming Shot) |
| Videos | Edit: Still image capture, Time trimming |
| **Storage** | |
| Media | • Internal memory: Approximately 18 MB<br>• External memory (Optional): SD card (1–2 GB guaranteed), SDHC card (up to 32 GB guaranteed), SDXC card (up to 64 GB guaranteed)<br>Internal memory capacity may not match these specifications. |
| File format | • Still Image: JPEG (DCF), EXIF 2.21, DPOF 1.1, PictBridge 1.0<br>• Movie Clip: MP4 (Video: MPEG-4.AVC/H.264, Audio: AAC) |

Image size

For 1 GB SD: Number of photos

| | | Super Fine | Fine | Normal |
|---|---|---|---|---|
| 14M | 4320 X 3240 | 144 | 259 | 381 |
| 12M | 4320 X 2880 | 162 | 287 | 423 |
| 10M | 4320 X 2432 | 190 | 343 | 498 |
| 10M | 3648 X 2736 | 201 | 353 | 519 |
| 8M | 2832 X 2832 | 246 | 435 | 630 |
| 5M | 2592 X 1944 | 386 | 686 | 950 |
| 3M | 1984 X 1488 | 624 | 1,065 | 1,404 |
| 2M | 1920 X 1080 | 846 | 1,373 | 1,993 |
| 1M | 1024 X 768 | 1,817 | 2,809 | 3,433 |

These figures are measured under Samsung's standard conditions. Your results may vary depending on the shooting conditions and camera settings.

| Wireless network (WB150F/WB151F/WB152F only) | |
|---|---|
| Social Sharing, Email, MobileLink, Remote Viewfinder, SkyDrive, Auto Backup, TV Link, Authentication Browser, Wi-Fi Direct | |
| **Interface** | |
| Digital output connector | USB 2.0 |
| Audio input/output | Internal speaker (Mono), Microphone (Mono) |
| Video output | A/V: NTSC, PAL (selectable) |
| DC power input connector | 5 V |
| **Power source** | |
| Rechargeable battery | Lithium-ion battery (SLB-10A, 1,030 mAh) |
| Connector type | Micro USB (5 pin) |
| The power source may differ depending on your region. | |

**Dimensions (W X H X D)**

106.5 X 59.9 X 23.4 mm (4.19 X 2.36 X 0.92 in.) (without protrusions)

**Weight**

- WB150/WB151: 187.9 g (6.628 oz.) (without battery and memory card)
- WB150F/WB151F/WB152F: 188.2 g (6.639 oz.) (without battery and memory card)

**Operating Temperature**

0–40 °C (32-104 °F)

**Operating Humidity**

5–85 %

**Software**

Intelli-studio

Specifications may change without notice to improve performance.

# Glossary

**ACB (Auto Contrast Balance)**

This feature automatically improves the contrast of your images when the subject is backlit or when there is a high contrast between your subject and the background.

**AEB (Auto Exposure Bracket)**

This feature automatically captures several images at different exposures to help you capture a properly-exposed image.

**AF (Auto Focus)**

A system that automatically focuses the camera lens on the subject. Your camera uses the contrast to focus automatically.

**Aperture**

The aperture controls the amount of light that reaches the camera's sensor.

**Camera shake (Blur)**

If the camera is moved while the shutter is open, the entire image may appear blurred. This occurs more often when the shutter speed is slow. Prevent camera shake by raising the sensitivity, using the flash, or using a faster shutter speed. Alternately, use a tripod, the DIS or OIS function to stabilize the camera.

**Composition**

Composition in photography means arranging objects in a photo. Usually, abiding by the rule of thirds leads to a good composition.

**DCF (Design rule for Camera File system)**

A specification to define a file format and file system for digital cameras created by the Japan Electronics and Information Technology Industries Association (JEITA).

**Depth of field**

The distance between the nearest and farthest points that can be acceptably focused in a photograph. Depth of field varies with lens aperture, focal length, and distance from the camera to the subject. Selecting a smaller aperture, for example, will increase the depth of field and blur the background of a composition.

**Digital zoom**

A feature that artificially increases the amount of zoom available with a zoom lens (Optical zoom). When using the Digital zoom, the image quality will deteriorate as the magnification increases.

**DPOF (Digital Print Order Format)**

A format for writing printing information, such as selected images and number of prints, on a memory card. DPOF-compatible printers, sometimes available at photo shops, can read the information from the card for convenient printing.

**EV (Exposure Value)**

All the combinations of the camera's shutter speed and lens aperture that result in the same exposure.

**EV Compensation**

This feature allows you to quickly adjust the exposure value measured by the camera, in limited increments, to improve the exposure of your photos. Set the EV compensation to -1.0 EV to adjust the value one step darker and 1.0 EV to one step brighter.

**Exif (Exchangeable Image File Format)**

A specification to define an image file format for digital cameras created by the Japan Electronic Industries Development Association (JEIDA).

**Exposure**

The amount of light allowed to reach the camera's sensor. Exposure is controlled by a combination of the shutter speed, the aperture value, and ISO sensitivity.

**Flash**

A speed light that helps to create adequate exposure in low-light conditions.

**Focal length**

The distance from the middle of the lens to its focal point (in millimeters). Longer focal lengths result in narrower angles of view and the subject is magnified. Shorter focal lengths result in wider angles of view.

**Histogram**

A graphical representation of the brightness of an image. The horizontal axis represents the brightness and the vertical axis represents the number of pixels. High points at the left (too dark) and right (too bright) on the histogram indicate a photo that is improperly exposed.

### H.264/MPEG-4

A high-compression video format established by international standard organizations ISO-IEC and ITU-T and developed by the Joint Video Team (JVT). This codec is capable of providing good video quality at low bit rates.

### Image sensor

The physical part of a digital camera that contains a photosite for each pixel in the image. Each photosite records the brightness of the light that strikes it during an exposure. Common sensor types are CCD (Charge-coupled Device) and CMOS (Complementary Metal Oxide Semiconductor).

### ISO sensitivity

The sensitivity of the camera to light, based on the equivalent film speed used in a film camera. At higher ISO sensitivity settings, the camera uses a higher shutter speed, which can reduce blur caused by camera shake and low light. However, images with high sensitivity are more susceptible to noise.

### JPEG (Joint Photographic Experts Group)

A lossy method of compression for digital images. JPEG images are compressed to reduce their overall file size with minimal deterioration of the image resolution.

### LCD (Liquid Crystal Display)

A visual display commonly used in consumer electronics. This display needs a separate backlight, such as CCFL or LED, to reproduce colors.

### Macro

This feature allows you to capture close-up photos of very small objects. When using the macro feature, the camera can maintain a sharp focus on small objects at a near life-size ratio (1:1).

### Metering

The metering refers to the way in which the camera measures the quantity of light to set the exposure.

### MJPEG (Motion JPEG)

A video format which is compressed as a JPEG image.

### Noise

Misinterpreted pixels in a digital image that may appear as misplaced or random, bright pixels. Noise usually occurs when photos are shot with a high sensitivity or when a sensitivity is automatically set in a dark place.

### OIS (Optical Image Stabilization)

This feature compensates in real-time for shaking and vibrating while shooting. There is no image degradation compared to Digital Image Stabilization feature.

### Optical zoom

This is a general zoom which can enlarge images with a lens and does not deteriorate quality of images.

### Quality

An expression of the rate of compression used in a digital image. Higher quality images have a lower rate of compression, which usually results in a larger file size.

### Resolution

The number of pixels present in a digital image. High resolution images contain more pixels and typically show more detail than low resolution images.

### Shutter speed

Shutter speed refers to the amount of time it takes to open and close the shutter, and it is an important factor in the brightness of a photo, as it controls the amount of light which passes through the aperture before it reaches the image sensor. A fast shutter speed allows less time to let light in and the photo becomes darker and more easily freezes subjects in motion.

### Vignetting

A reduction of an image's brightness or saturation at the periphery (outer edges) compared to the center of the image. Vignetting can draw interest to subjects positioned in the center of an image.

### White balance (color balance)

An adjustment of the intensities of colors (typically the primary colors red, green, and blue), in an image. The goal of adjusting the white balance, or color balance, is to correctly render the colors in an image.

**Correct Disposal of This Product (Waste Electrical & Electronic Equipment)**

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

PlanetFirst represents Samsung Electronics' commitment to sustainable development and social responsibility through eco-driven business and management activities.

**Correct disposal of batteries in this product**

(Applicable in the European Union and other European countries with separate battery return systems)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

This Class [B] digital apparatus complies with Canadian ICES-003.

Dispose unwanted electronics through an approved recycler.
To find the nearest recycling location, go to our website:
www.samsung.com/recyclingdirect Or call, (877) 278 - 0799

# FCC notice

**Caution**:
Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:**
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorientate, or relocate, the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

- **Declaration of Conformity**

| | |
|---|---|
| Trade Name | : Samsung Electronics America, Inc. |
| Model No. | : Samsung WB150/WB150F/ WB151/WB151F/WB152F |
| Responsible Party | : Samsung Electronics America, Inc. |
| Address | : 85 Challenger Road, Ridgefield Park, NJ 07660 |
| Telephone No. | : 1-800-SAMSUNG (726-7864) |

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC ID:A3LWB150F**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**RF exposure statements:**
This device is for handheld operation only. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

## CAUTION

**RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.**
**DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.**

**Operation is subject to the following two conditions:**
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

**Caution:**
Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.
IC: 649E-WB150F

This equipment may be operated in all EU countries.
In France, this equipment may only be used indoors.

Complies with IDA Standards DA100790

Approved by PTA, year 2011

SAMSUNG WNA 038 ICT

NTC
Type Approved
No.: ESD-1105767C

TA-2011/1257 APPROVED

NO-L-14041/01/2011/ETA/2011
1577/2011/WRLO

# Declaration of Conformity

## Product details

For the following

Product : DIGITAL CAMERA

Model(s) : WB150F, WB151F, WB152F

## Declaration & Applicable standards

We hereby declare that the product(s) above is(are) in compliance with the essential requirements and other provisions of the R&TTE Directive (1999/5/EC), the Low Voltage Directive (2006/95/EC) and the Electromagnetic Compatibility Directive (2004/108/EC) by application of:

EN 60950-1:2006+A1:2010
EN 55022:2006+A1 :2007
EN 61000-3-3:2008
EN 301 489-1 v1.8.1
EN62311 :2008
EN 55024:1998+A1:2001+A2:2003
EN 61000-3-2:2006 +A1:2009 +A2:2009
EN 300 328 v1.7.1
EN 301 489-17 V2.1.1

and the Eco-Design Directive (2009/125/EC) implemented by Regulations (EC) No 278/2009 for external power supplies.

## Representative in the EU

Samsung Electronics Euro QA Lab.
Blackbushe Business Park
Saxony Way, Yateley, Hampshire
GU46 6GG, UK

(YEAR TO BEGIN AFFIXING CE MARKING 2011)

21 October, 2011
(Place and date of issue)

Joong-Hoon Choi / Lab. Manager
(Name and signature of authorized person)

* This is not the address of Samsung Service Centre. For the address or the phone number of Samsung Service Centre, see the warranty card or contact the retailer where you purchased your product.

# Declaration sentence in official languages

| Nation | Declaration |
|---|---|
| **Cesky** | Samsung Electronics tímto prohlašuje, že tento digitální fotoaparát je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES. |
| **Dansk** | Samsung Electronics erklærer herved, at digitale kameraer overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF. |
| **Deutsch** | Hiermit erklärt Samsung Electronic, dass sich die Digitalkamera in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet. |
| **Eesti** | Käesolevaga kinnitab Samsung Electronics digitaalkaamera vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele. |
| **English** | Hereby, Samsung Electronics declares that this digital camera is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. |
| **Español** | Por medio de la presente Samsung Electronics declara que la cámara digital cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE. |
| **Ελληνική** | ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ η Samsung Electronics ΔΗΛΩΝΕΙ ΟΤΙ η ψηφιακή φωτογραφική μηχανή ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ. |
| **Français** | Par la présente Samsung Electronic déclare que l'appareil photo numérique est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE. |
| **Italiano** | Con la presente Samsung Electronicsdichiara che questa fotocamera digitale è conforme ai requisiti essenziali e alle altre disposizioni stabilite dalla Direttiva 1999/5/CE. |
| **Latviski** | Ar šo Samsung Electronics deklarē, ka digitālā kamera atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem. |
| **Lietuvių** | Šiuo Samsung Electronics deklaruoja, kad šis skaitmeninis fotoaparatas, atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas. |
| **Nederlands** | Hierbij verklaart Samsung Electronics dat de digitale camera in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG. |

| Nation | Declaration |
|---|---|
| **Malti** | Hawnhekk, Samsung Electronics, tiddikjara li din il-kamera diġitali hi konformi mar-rekwiżiti essenzjali u ma' dispożizzjonijiet rilevanti oħrajn ta' Direttiva 1999/5/KE. |
| **Magyar** | A Samsung Electronics kijelenti, hogy ez a digitális fényképezőgép megfelel az 1999/5/EK irányelv alapvető követelményeinek és egyéb vonatkozó előírásainak. |
| **Polski** | Niniejszym firma Samsung Electronics oświadcza, że ten aparat cyfrowy jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/WE. |
| **Português** | Samsung Electronics declara que esta câmera digital está conforme os requisitos essenciais e outras disposições da Directiva 1999/5/CE. |
| **Slovensko** | Samsung Electronics izjavlja, da je ta digitalni fotoaparat v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES. |
| **Slovensky** | Samsung Electronics týmto vyhlasuje, že tento digitálny fotoaparát spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES. |
| **Suomi** | Samsung Electronics vakuuttaa täten että tämä digitaalikamera on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen. |
| **Svenska** | Härmed intygar Samsung Electronicsatt dessa digitalkameror står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG. |
| **Български** | С настоящото Samsung Electronics декларира, че този цифров фотоапарат е в съответствие със съществените изисквания и другите приложими разпоредби на Директива 1999/5/ЕК. |
| **Română** | Prin prezenta, Samsung Electronics, declară că această cameră foto digitală este în conformitate cu cerinţele esenţiale şi alte prevederi relevante ale Directivei 1999/5/CE. |
| **Norsk** | Samsung Electronicserklærer herved at dette digitalkameraet er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF. |
| **Türkiye** | Bu belge ile, Samsung Electronics bu dijital kameranın 1999/5/EC Yönetmeliginin temel gerekliliklerine ve ilgili hükümlerine uygun olduğunu beyan eder. |
| **Íslenska** | Hér með lýsir Samsung Electronics því yfir að þessi stafræna myndavél sé í samræmi við grunnkröfur og önnur ákvæði tilskipunar 1999/5/EB. |

# Index


## A

AF-assist light
- Location 16
- Settings 125

AF Lamp 125

AF Sound 122

Aperture Priority mode 41

Aperture value 40

Auto Backup 113

Auto Contrast Balance (ACB)
- Playback mode 89
- Shooting mode 70

Auto Exposure Bracket (AEB) 73

A/V port 16

## B

Battery
- Caution 135
- Charging 20
- Inserting 19

Beauty Shot mode 38

Blink Detection 66

Brightness
- Playback mode 89
- Shooting mode 69

Burst modes
- Auto Exposure Bracket (AEB) 73
- Continuous 73
- Motion Capture 73

## C

Camera maintenance 129

Camera specifications 141

Capturing an image from video 86

Charging 20

Cleaning
- Camera body 129
- Display 129
- Lens 129

Connecting to a computer
- Mac 97
- Windows 92

Contrast
- Playback mode 89
- Shooting mode 74

## D

Date/Time Set 124

Deleting files 81

Digital Print Order Format (DPOF) 90

Digital zoom 29

Disconnecting the camera 96

Display brightness 123

Display type 26

## E

Editing photos 87

Editing videos
- Capturing 86
- Trimming 86

Enlarging 83

Error messages 127

Exposure 69

## F

Face Detection 64

Flash
- Auto 57
- Fill in 58
- Off 57
- Red-eye 58
- Red-eye Fix 58
- Slow Sync 58

Focus area
- Center AF 63
- Multi AF 63
- Selection AF 63
- Tracking AF 63

Formatting 125

Function button 18

## G

Guide Line 122

## H

Half-press shutter 32

## I

Icons
- Playback mode 77
- Shooting mode 23

Image Adjustment
- ACB 89
- Brightness
  - Playback mode 89
  - Shooting mode 69
- Contrast
  - Playback mode 89
  - Shooting mode 74
- Red-eye 90
- Saturation
  - Playback mode 89
  - Shooting mode 74
- Sharpness 74

Image quality 55

Imprint 125

Intelli-studio 94

Intelli zoom 30

ISO sensitivity 59

## L

Language settings 124

Live Panorama mode 44

## M

Macro
- Auto Macro 61
- Macro 61
- Manual Focus 61

Magic Frame mode 45

Magic Plus mode
- Artistic Brush 48
- Live Panorama 44
- Magic Frame 45
- Movie Filter 50
- Photo Filter 49
- Picture in Picture 46
- Split Shot 46

Manual mode 43

Memory card
- Caution 133
- Insert 19

Menu button 18

Metering
- Center-weighted 70
- Multi 70
- Spot 70

Mode dial 17

Motion Capture 73

Movie mode 51

My star
- Cancelling 79
- Ranking 78
- Registering 67

## O

Optical Image Stabilization (OIS) 31

Optional accessories 15

## P

PictBridge 98

Playback button 18

Playback mode 77

Power button 16

Power save mode 123

Printing photos 98

Program mode 39

Protecting files 81

## Q

Quick view 123

## R

Red-eye
- Playback mode 90
- Shooting mode 57

Remote Viewfinder 110

Reset 125

Resolution
- Playback mode 87
- Shooting mode 54

Retouching faces
- Playback mode 90
- Shooting mode 38

Rotating 87

## S

Saturation
- Playback mode 89
- Shooting mode 74

Scene mode 37

Self portrait 65

Service center 138

Settings 124

Sharpness 74

Shooting portraits
- Beauty Shot mode 38
- Blink Detection 66
- Face Detection 64
- Red-eye 58
- Red-eye fix 58
- Self portrait 65
- Smart Face Recognition 66
- Smile Shot 65

Shutter button 16

Shutter Priority mode 42

Slide show 84

Smart Album 79

Smart Auto mode 35

Smart Face Recognition 66

Smart Filter
- Photo shooting mode 49
- Playback mode 88
- Video recording mode 50

Smart Scene Detection mode 52

Smile Shot 65

Sound settings 27

Start Image 122

Status lamp 17

## T

Thumbnails 80

Timer
- Shooting mode 56
- Timer lamp 16

Time settings 21

Time zone settings 21, 124

Transferring files
- Auto Backup 113
- Email 106
- Mac 97
- Windows 92

Tripod mount 16

TV Link 115

## U

Unpacking 15

USB port 16

## V

Video
- Playback mode 85
- Shooting mode 51

Video out 123

Viewing files
- Panoramic photos 84
- Slide show 84
- Smart Album 79
- Thumbnails 80
- TV 91

## W

Website
- Accessing 104
- Uploading photos or videos 104

White Balance 71

Wireless network 100

## Z

Zoom
- Using the zoom 29
- Zoom button 17
- Zoom sound settings 75

Please refer to the warranty that came with your product or visit our website, www.samsung.com, for after-sales service or inquiries.

CE 0678 !